

CHAPTER 5 – SECTION 4(F) EVALUATION

The Utah Department of Transportation (UDOT), in conjunction with Syracuse City, proposes to make transportation related improvements to the Syracuse Road (SR-108, 1700 South, or Antelope Drive) corridor between 1000 West and 2000 West (Reference Post 3 to 4) in Syracuse City, Davis County, Utah, a distance of one mile, to accommodate the mobility needs of the community and provide for future travel demand. Improvements would include widening the existing two-lane roadway to a consistent five-lane cross-section (two travel lanes in each direction and a two-way left-turn lane) with shoulders, curb and gutter, parkstrips, and sidewalks. An Environmental Impact Statement (EIS) was prepared for the project. This level of NEPA documentation was principally decided due to potential impacts to historic Section 4(f) resources as well as impacts felt by the residents, including potential relocations, noise, and social effects.

This chapter describes the proposed action and identifies and evaluates alternatives developed to meet the purpose and need for the project. Section 4(f) resources within the proposed Syracuse Road corridor area are identified, and the potential impacts of the reasonable alternatives to each Section 4(f) resources are described. Avoidance alternatives for individual Section 4(f) resources are discussed, and mitigation measures to minimize harm to each Section 4(f) resource that cannot be avoided are identified (no total avoidance alternatives were identified). The chapter concludes by identifying the alternative that results in the least harm to Section 4(f) resources.

Section 4(f) of the Department of Transportation Act of 1966

The Secretary [of Transportation] may approve a transportation program or project ... requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of a historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if—

- (1) there is no prudent and feasible alternative to using that land; and
- (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use. (49 U.S.C. 303(c))

This document meets all requirements of the Federal Highway Administration's (FHWA) implementing regulations (23 CFR 771.135) and guidance established in Technical Advisory T6640.8A. This Section 4(f) evaluation is organized in the following manner.

- Section 5.1: Describes the proposed action, establishes the purpose and need for the project, and identifies alternatives evaluated to meet the purpose and need.
- Section 5.2: Identifies potential Section 4(f) properties within the project study area.
- Section 5.3: Describes potential impacts and determines Section 4(f) "use."
- Section 5.4: Evaluates whether a Section 4(f) total avoidance alternative exists and whether it is feasible and prudent. If there is no feasible and prudent total avoidance alternative, all remaining feasible and prudent alternatives are evaluated to determine if individual properties can be avoided.
- Section 5.5: Describes mitigation measures to minimize harm to Section 4(f) resources.
- Section 5.6: Summarizes findings and identifies the alternative of least harm.
- Section 5.7: Describes coordination efforts.

5.1 PROPOSED ACTION

Syracuse City is no longer a small farming community. Over the past five years Syracuse City has experienced rapid growth. Syracuse Road, between 1000 West and 2000 West, has become inadequate to carry the increased traffic resulting from population growth. UDOT and FHWA are proposing improvements to Syracuse Road that would accommodate the increased traffic and create opportunities to meet future 2030 transportation needs along the corridor.

5.1.1 Purpose and Need of the Proposed Action

The purpose of this project is to accommodate the transportation needs of the community and provide for future travel demand between 1000 West and 2000 West in Syracuse, Utah (see project location in Figure 5-1), including:

- **Accommodate the regional travel demand for east-west travel in northwest Davis County.** Syracuse Road plays an important role in meeting the travel demand for the existing development and projected growth of the communities of this section of the county. It provides:
 - Commuter access to nearby employment centers such as Freeport Center and Hill Air Force Base as well as to I-15 for more distant employment centers such as Salt Lake City and Ogden
 - Shopping access to local and regional commercial districts
 - Recreational access to Antelope Island State Park and other areas associated with the Great Salt Lake
- **Provide a transportation facility consistent with current standards, including those adopted by UDOT and the American Association of State Highway and Transportation Officials (AASHTO), and improve safety features of the facility to address current and future safety concerns.** These safety concerns include:
 - Improvements to solve current safety concerns, especially the high number of rear-end and intersection accidents
 - Improvements that would safely accommodate future travel demand

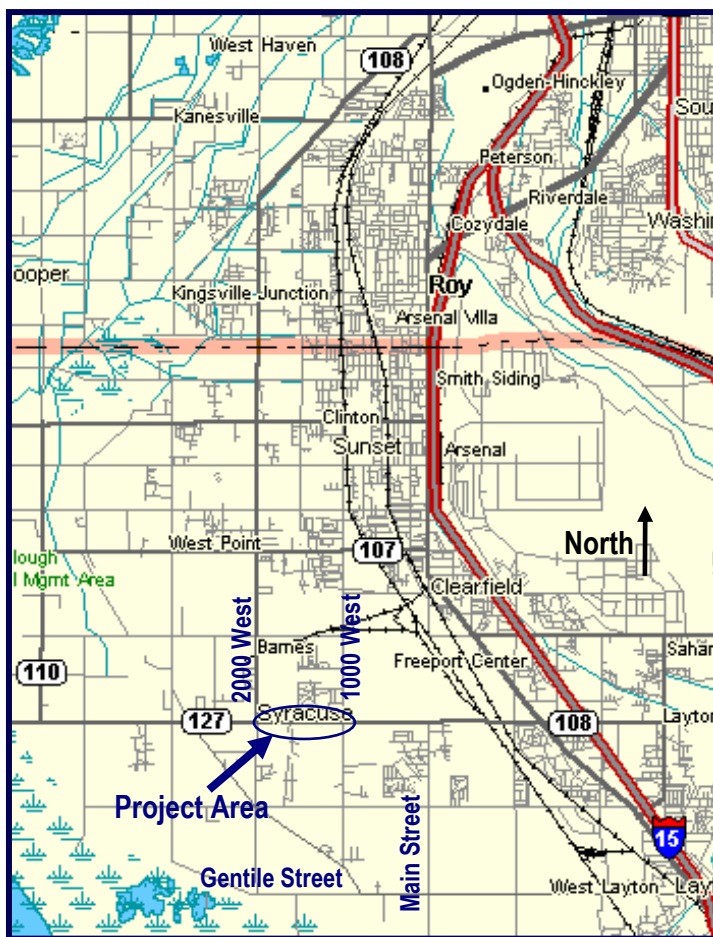


Figure 5-1. Project Location Map

- **Provide a transportation facility consistent with state and regional plans.** These plans include:
 - UDOT has identified the need for Syracuse Road improvements as part of the state highway system.
 - Wasatch Front Regional Council (WFRC), in its Long Range Transportation Plan (LRTP) Update, 2004-2030, has recognized Syracuse Road as an important facility to meet the needs of vehicle, transit, and bicycle traffic.
- **Provide a transportation facility consistent with local plans.** These plans include:
 - Syracuse City has included improvements to Syracuse Road in its Master Transportation Plan.
 - Syracuse City has a General Plan that guides the land use development of the City.
 - Syracuse City has also developed its Town Center Master Plan with Syracuse Road as an integral part of the plan.
- **Enhance the opportunities to incorporate multi-modal facilities within the corridor.**
 - Provide safe bus stops along the route and ensure access to the proposed Ogden to Salt Lake City rail commuter line
 - Provide for safer bicycle and pedestrian movement

The proposed action is independent of other projects under consideration and is consistent with several local and regional planning documents, including:

- *North Legacy Transportation Corridor Study*, WFRC, August, 2001
- *Syracuse City General Plan*, adopted by ordinance 03-01, February 2003
- *Syracuse City Master Transportation Plan*, adopted February 1997
- *Syracuse City Town Center Master Plan*, adopted March 11, 2003
- *Wasatch Front Urban Long Range Transportation Plan Update: 2004 - 2030*, WFRC, adopted December 2003
- *SR-108: Syracuse Road; Clearfield Main Street to 1000 West Environmental Document* (Categorical Exclusion), approved July 19, 2002

For more information relating to purpose and need, see Chapter 1.

5.1.2 Alternative Development

In order to evaluate alternatives which completely avoid individual Section 4(f) resources, a wide range of alternatives were developed as part of the Section 4(f) evaluation process and project alternative screening process (see discussion in Chapter 2). The initial list of alternatives was not constrained by mode, ability to meet project purpose and need, or cost. The intent was to begin with a broad listing of specific and independent actions that could be performed and evaluated for avoidance and minimization of historic resources along the corridor. In addition to individual actions, combinations of actions were also considered. Twelve build alternatives were analyzed for the project, as well as the No-action Alternative, the Transportation System Management (TSM) Alternative, and the Transit Alternative. These alternatives are summarized in Table 5-1.

Table 5-1. Summary of Alternatives.

Alternative		Description
No-action		The No-action Alternative assumes that short-term minor restoration (safety and maintenance) activities that maintain continued operation of the existing roadway facility would be implemented. The basic characteristic of the No-action Alternative is one travel lane in each direction on Syracuse Road.
TSM		The TSM Alternative includes activities that improve traffic flow and provide limited capacity improvement without building new travel lanes. TSM activities include: intersection improvements (such as turn lanes and signal coordination and optimization), access management to reduce conflicts, and Transportation Demand Management (TDM) activities to reduce demand, such as employer based efforts (ride-sharing, transit promotion, and staggered or flexible works hours), and community efforts (encouraging walking and biking, and telecommuting).
Transit		The Transit Alternative assumes that public transit system improvements would be implemented. Examination of this alternative included a review of currently proposed transit improvements from the WFRC Transit Plan. The range of transit improvements investigated included both bus and rail improvements.
Combined Alternatives (all combined alternatives include TSM, TDM, and Transit Improvements)		
Three-Lane		Includes the improvements along Syracuse Road between 1000 West and 2000 West to create a consistent three-lane cross-section (one travel lane in each direction and a two-way left-turn lane) with shoulders, curb and gutter, parkstrips, and sidewalks.
On-corridor	Five-Lane	Consistent with local and regional transportation master plans, the Five-Lane Alternative includes improvements along Syracuse Road between 1000 West and 2000 West to create a consistent five-lane cross-section (two travel lanes in each direction and a two-way left-turn lane) with shoulders, curb and gutter, parkstrips, and sidewalks.
		A ■ Widens roadway equally to both the north and south
		■ Widens both north and south at 1000 West intersection
		B ■ Widens to the south between 1050 W and 1650 W
		■ Widens to the north between 1650 W and 2000 W
		C ■ Widens both north and south at 1000 West intersection
	110-ft Cross-Section	■ Widens to the south between 1050 W and 1750 W
		■ Widens to the north between 1750 W and 2000 W
		D ■ Widens both north and south at 1000 West intersection
		■ Widens to the north between 1050 W and 2000 W
		E ■ Widens both north and south at 1000 West intersection
		■ Shifts off-corridor (350 feet to south) between 1050 W and 1750 W
		■ Widens to the north between 1750 W and 2000 W
		F ■ Widens both north and south at 1000 West intersection
		■ Shifts off-corridor (400 feet to south) between 1050 W and 1600 W
		■ Shifts off-corridor (400 feet to north) between 1600 W and 1975 W
		■ Widens to the north between 1975 W and 2000 W
	90-ft Cross-Section	G ■ Same alignment as Alternative A with 90-ft cross-section
		H ■ Same alignment as Alternative C with 90-ft cross-section
		I ■ Same alignment as Alternative D with 90-ft cross-section
Seven-Lane		Includes improvements along Syracuse Road between 1000 West and 2000 West to create a consistent seven-lane cross-section (three travel lanes in each direction and a two-way left-turn lane) with shoulders, curb and gutter, parkstrips, and sidewalks.
Improving Adjacent Parallel Roads		Syracuse Road remains two-lanes, and corridors to the north and south [West Point Road (300 North) and Gordon Avenue (2700 South)] are improved to five-lane roadways.

First Alternatives Screening

The first alternatives screening process compared estimated year 2030 travel demand volumes along Syracuse Road (how many vehicles want to use the roadway) to capacity or level of service (LOS) (see Section 1.3 for a discussion of LOS). Alternatives were eliminated from further study when it became apparent that they did not meet the 2030 travel demand at LOS D or when they provided excess capacity well beyond year 2030 demand. Details of the first screening can be found in Chapter 2 and are summarized below.

No-action Alternative – This alternative would not provide adequate capacity and therefore would not meet the first item of the purpose and need for the project (to accommodate east-west travel demand). However, this alternative is carried through the document in accordance with CEQ guidelines and to provide a baseline for evaluation of the build alternatives.

TSM Alternative; Transit Alternative – These alternatives performed similar to the No-action Alternative. They were eliminated from further study as stand-alone alternatives because they would not provide adequate capacity and therefore would not meet the first item of the purpose and need for the project. However, elements of them are incorporated into the build alternatives.

Three-Lane Alternative – This alternative performed similar to the No-action Alternative. It was eliminated from further study because it would not provide adequate capacity and therefore would not meet the first item of the purpose and need for the project.

Improving Adjacent Parallel Roads Alternative – This alternative assumes that the study area is enhanced with TSM and Transit improvements and that Syracuse Road remains a two-lane roadway. This alternative includes improving adjacent parallel corridors [West Point Road (300 North) and Gordon Avenue (2700 South)], which are planned as three-lane facilities in 2030 to five-lane facilities. West Point Road is two miles north of Syracuse Road; Gordon Avenue is one mile south. Neither of these roadways connects directly to I-15.

As a two-lane roadway, Syracuse Road would be expected to have a capacity of 12,000 vpd for LOS D operations. The projected 2030 traffic volume on Syracuse Road under this scenario would be 21,000 vpd. Because the traffic volume would be higher than capacity, LOS F traffic operations would result. The improved parallel facilities would not be expected to draw a sizeable volume of traffic from Syracuse Road. They are too far out of direction and would not provide access to I-15 as Syracuse Road does. Drivers would be unlikely to travel in circuitous pathways to reach their destinations. Syracuse Road would continue to be the preferred facility in the Syracuse area regardless of improvements to parallel roadways.

Seven-Lane Alternative – The seven-lane alternative would provide much greater capacity than is needed in 2030. This alternative was eliminated from further study because there are alternatives that meet the 2030 travel demand and have fewer impacts.

Second Alternatives Screening

The second screening process consisted of three parts: evaluating compatibility of the alternatives with purpose and need, evaluating preliminary environmental impacts, and evaluating the potential for impacts to Section 4(f) properties (parks and historic buildings). All alternatives identified for consideration beyond the first screening were evaluated under all three parts.

Alternatives selected for additional study beyond the first level of screening include the No-action Alternative and the Five-Lane Build Alternative. The nine five-lane alternatives (Alternatives A - I) developed are shown in Figures 5-2 through 5-5 and described in Table 5-1.

Alternatives A through F provide improvements to Syracuse Road between 1000 West and 2000 West, including:

- Widening of the corridor to a 110-ft, five-lane cross-section (four 12-ft travel lanes with a 14-ft two-way left-turn lane) with 12-ft shoulders that include a 5-ft bicycle lane, curb and gutter, 3.5-ft parkstrips, and 6-ft sidewalks between 1000 West and 2000 West, a distance of one mile
- Allowing bicycle usage along the entire corridor by providing 5-ft wide Class II bicycle lanes (provides a striped and signed lane on each side of a roadway for one-way bicycle travel)
- Widening and improving all signalized intersections along the corridor to provide dedicated right and/or left-turn lanes and upgraded traffic signals (TSM strategies). Raised medians would also be implemented at the signalized intersections to protect left-turn movements
- Accommodating bus service along the corridor by providing 12-ft shoulders that can be used for bus loading and unloading
- Making storm drain system improvements along the corridor
- Implementing Context Sensitive Solutions (CSS), including: addition of a 10-ft wide landscape/utility area to maximize the space between the roadway and residences/businesses remaining on the corridor, addition of 6-ft wide sidewalks along the corridor, piping open irrigation ditches, and addition of lighting (certain types of lighting including decorative lighting may require cost participation by Syracuse City)

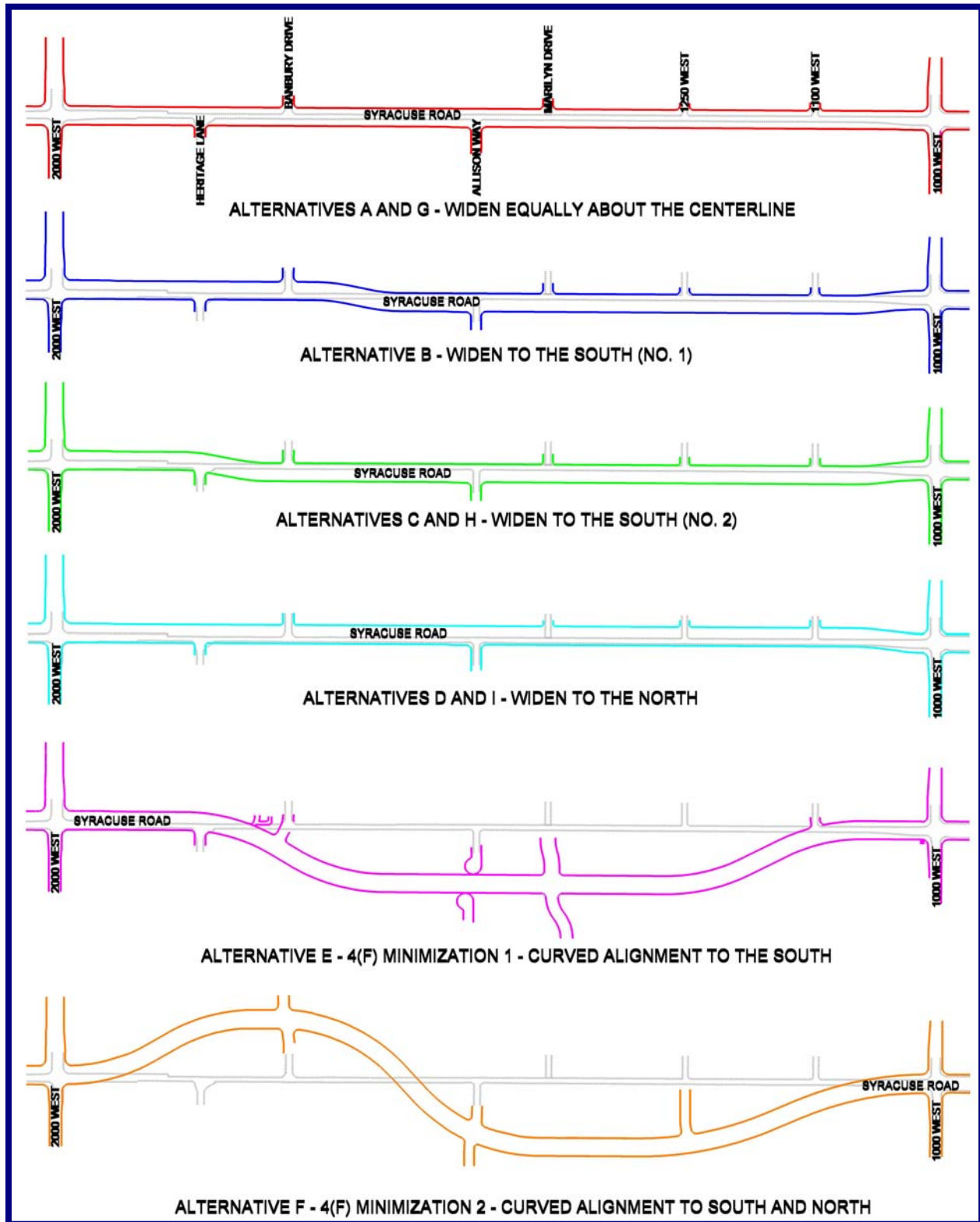
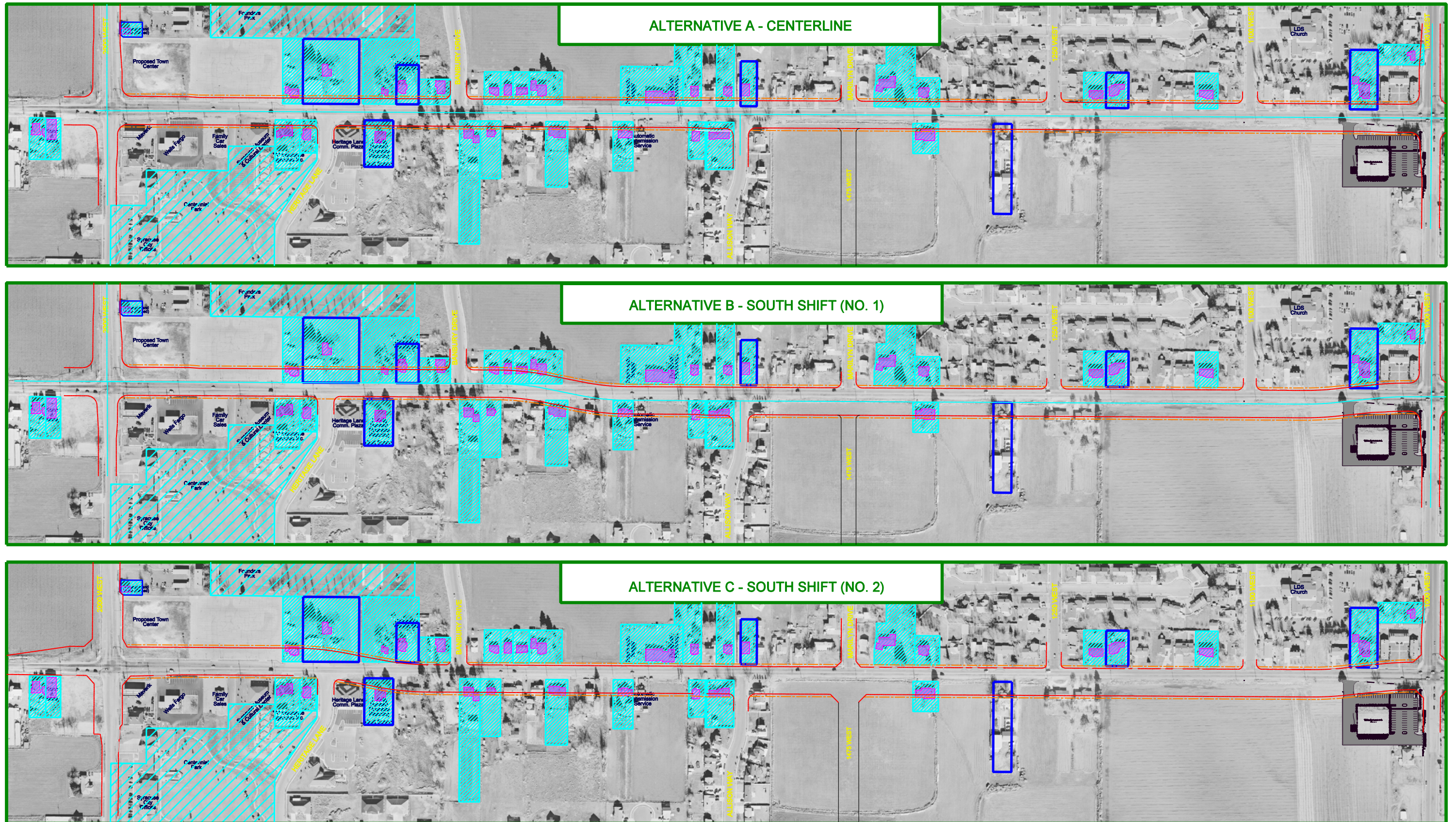


Figure 5-2. Five-Lane Build Alternatives.

Alternatives G through I provide improvements to Syracuse Road between 1000 West and 2000 West, including:

- Widening of the corridor to a 90-ft, five-lane cross-section (four 12-ft travel lanes with a 14-ft two-way left-turn lane) with 5-ft shoulders that include the 5-ft bicycle lane, curb and gutter, and 6-ft sidewalks between 1000 West and 2000 West, a distance of one mile
- Allowing bicycle usage along the entire corridor by providing 5-ft wide Class II bicycle lanes (provides a striped and signed lane on each side of a roadway for one-way bicycle travel)
- Widening and improving all signalized intersections along the corridor to provide dedicated right and/or left-turn lanes and upgraded traffic signals (TSM strategies). Raised medians would also be implemented at the signalized intersections to protect left-turn movements
- Providing bus-pullout areas that can be used for bus loading and unloading
- Making storm drain system improvements along the corridor
- Implementing CSS, including: addition of a 10-ft wide landscape/utility area to maximize the space between the roadway and residences/businesses remaining on the corridor, addition of 6-ft wide sidewalks along the corridor, piping open irrigation ditches, and addition of lighting (certain types of lighting including decorative lighting may require cost participation by Syracuse City)



LEGEND:

- RIGHT-OF-WAY LINE
- - - LANDSCAPE/UTILITY AREA OR EASEMENT
- SECTION 4(f) PROPERTY BOUNDARY
- SECTION 4(f) HISTORIC STRUCTURE
- LOCALLY IMPORTANT HISTORIC STRUCTURE

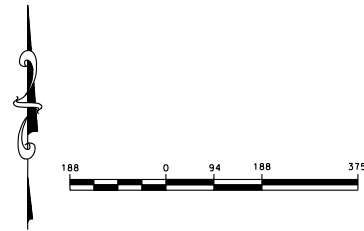
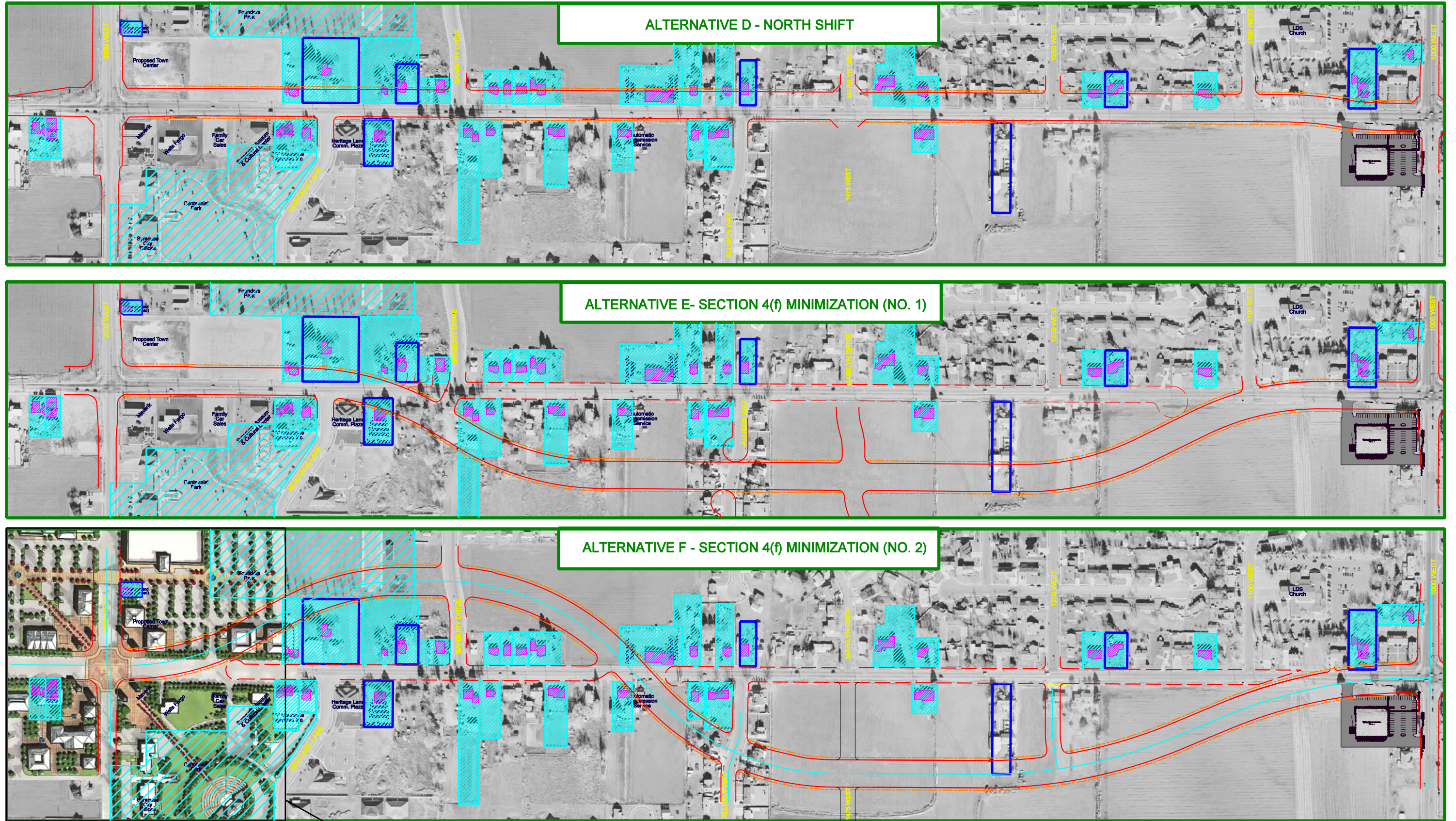


FIGURE 5-3
FIVE-LANE
BUILD ALTERNATIVES A, B, C



LEGEND:

- RIGHT-OF-WAY LINE
- - - LANDSCAPE / UTILITY AREA OR EASEMENT
- SECTION 4(f) PROPERTY BOUNDARY
- SECTION 4(f) HISTORIC STRUCTURE
- LOCALLY IMPORTANT HISTORIC STRUCTURE

TOWN CENTER MASTER PLAN
IS SHOWN FOR REFERENCE ONLY

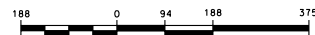
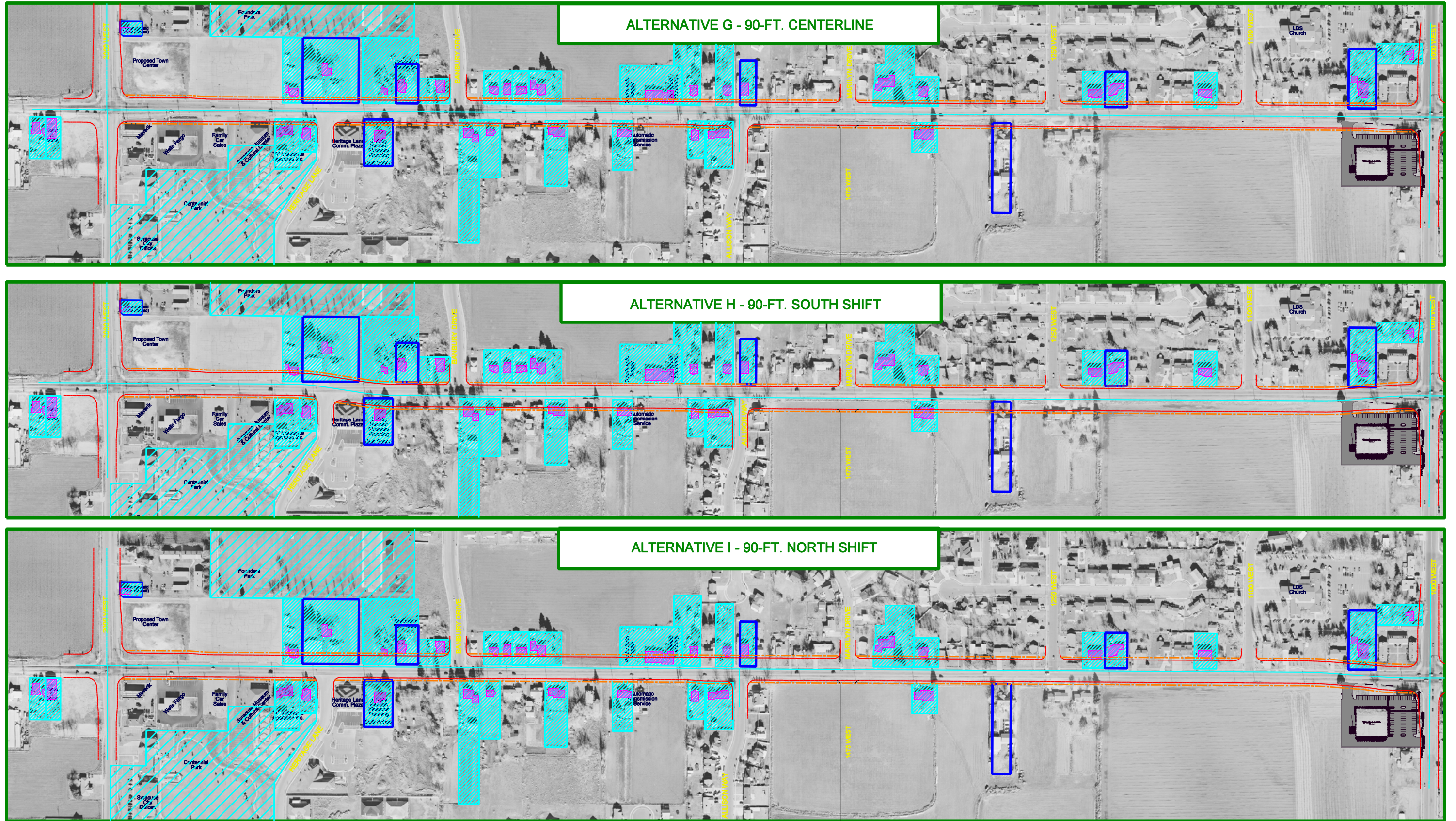


FIGURE 5-4
FIVE-LANE
BUILD ALTERNATIVES D, E, F



LEGEND:

- RIGHT-OF-WAY LINE
- - - LANDSCAPE / UTILITY AREA OR EASEMENT
- SECTION 4(f) PROPERTY BOUNDARY
- SECTION 4(f) HISTORIC STRUCTURE
- LOCALLY IMPORTANT HISTORIC STRUCTURE

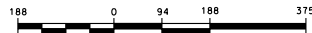


FIGURE 5-5
90 - FT. CROSS-SECTION
BUILD ALTERNATIVES G, H, I

Table 5-2 lists cross-section elements for the 90-ft and 110-ft cross-sections along with the applicable design standards.

Table 5-2. Comparison of Individual Cross-Section Elements of 90-ft and 110-ft Cross-Sections and Desirable and Minimum Design Standards.

Cross-Section Element	90-ft Cross -Section (feet)		110-ft Cross-Section (feet)		Minimum Standard (feet)	Desirable Standard (feet)
Two-way left-turn lane	14		14		10 ^U	14 ^U
Travel Lane	12		12		9 ^A	12 ^A
Shoulder	0	5	7	12	8 ^U	10-12 ^U
Bike Lane	5		5		(can include bike lane)	(can include bike lane)
					5 ^A	5 ^A
Parkstrip	0		3.5		0 (w/ 6' sidewalk) ^U 4 (w/ 4' sidewalk) ^U	4 ^U
Sidewalk	6		6		6 (w/ no parkstrip) ^U 4 (w/ 4' parkstrip) ^U	8 (w/ no parkstrip) ^U 6 (w/ 4' parkstrip) ^U
Curb/Gutter	2.5		2.5		2.5	2.5
Available Clear Zone (edge of outside travel lane to right-of-way)	14		24		20 ^A	20-22 ^A

Source: A = American Association of State Highway and Transportation Officials Standards, U = Utah Department of Transportation Standards

Purpose and Need Evaluation

As part of the second screening, alternatives were evaluated for their ability to meet the project's purpose and need. Table 5-3 summarizes the results of the purpose and need analysis.

Table 5-3. Purpose and Need Preliminary Screening.

Purpose and Need Categories	Description of Individual Purpose and Need Elements (as defined in Chapter 1)	Ability to Meet Purpose and Need (YES/NO) for Each Alternative								
		110-ft Cross-Sections						90-ft Cross-Sections		
		A	B	C	D	E	F	G	H	I
Need	Provides for Transportation System Linkage	YES	YES	YES	YES	YES	YES	YES	YES	YES
	Accommodates Regional Growth	YES	YES	YES	YES	YES	YES	YES	YES	YES
	Meets 2030 Capacity and Travel Demand	YES	YES	YES	YES	YES	YES	NO	NO	NO
	Safety	YES	YES	YES	YES	YES	YES	YES	YES	YES
Purpose	Accommodates regional east-west travel demand for NW Davis County	YES	YES	YES	YES	YES	YES	NO	NO	NO
	Consistency with current standards	YES	YES	YES	YES	YES	YES	NO	NO	NO
	Consistency with state & regional plans	YES	YES	YES	YES	YES	YES	NO	NO	NO
	Syracuse's Transportation Plan	YES	YES	YES	YES	YES	YES	NO	NO	NO
	Consistency with local plans Syracuse's General Plan	YES	YES	YES	YES	NO	NO	NO	NO	NO
	Syracuse's Town Center Master Plan	YES	YES	YES	YES	YES	NO	NO	NO	NO
	Enhances opportunities to Incorporate multi-modal facilities within the corridor	YES	YES	YES	YES	YES	YES	YES	YES	YES

Accommodate Regional East-West Travel Demand for NW Davis County

Table 5-4 shows the traffic capacities of the 110-ft and 90-ft cross-sections. From the standpoint of meeting travel demand, the 90-ft cross-sections would not meet the 30,000 vpd demand, because of decreased capacity due to narrower shoulders.

Table 5-4. LOS D Traffic Capacity Compared with 2030 Travel Demand for 90-ft and 110-ft Cross-Sections.

Alternative	Syracuse Road LOS D Traffic Capacity (vehicles per day)	Syracuse Road Year 2030 Travel Demand (vehicles per day)
110-ft Cross-Section	30,500	30,000
90-ft Cross-Section	28,975	30,000

Note: 2030 Demand varies throughout corridor and is up to 30,000 vpd near 1000 West and 2000 West intersections

Consistency with Current Standards

The 90-ft cross-section was evaluated to see if it would provide a transportation facility consistent with current standards, including those adopted by UDOT and the American Association of State Highway and Transportation Officials (AASHTO), and improve safety features of the facility to address current and future safety concerns. Table 5-2 compares the widths of individual cross-section elements of the 110-ft and 90-ft cross-sections with minimum and desirable standards.

The 90-ft cross-sections (G-I) would not provide adequate clear zone (requiring a design exception from FHWA) and would not meet desirable standards for some roadway elements. The 5-ft bike lane and shoulder would provide fewer safety benefits than a 12-ft bike lane and shoulder, would not allow for parking/disabled vehicles, and would create more difficulty for vehicles to enter/exit driveways (no room for speed change).

Consistency with State and Regional Plans

The 90-ft roadway cross-sections (G-I) differ from those of state and regional plans. WFRC has identified a need for four travel lanes within a 106-ft right-of-way. UDOT has provided for the roadway to be improved within a 110-ft right-of-way in its Statewide Transportation Improvement Plan (STIP) request to WFRC. Syracuse Road has already been constructed within a 106 to 110-ft right-of-way from I-15 to 1000 West, consistent with state and regional plans.

Consistency with Local Plans

Syracuse City Master Transportation Plan and General Plan

As part of the Syracuse City Master Transportation Plan, a roadway functional classification plan was developed and evaluated to help provide sufficient roadway transportation corridors that allow and encourage connectivity with the remainder of the region, but limit the impact of major road corridors on the overall quality of life. Syracuse Road was identified in this plan as an arterial with a right-of-way width of 106-ft (14-ft two-way left-turn lane, 12-ft travel lanes, 9.5-ft shoulders, 2.5-ft curb & gutter, 6-ft parkstrips, and 4-ft sidewalks). The Syracuse City General Plan incorporates the recommendations of the Master Transportation Plan. The 90-ft roadway sections (G-I) are not consistent with the Syracuse City Master Transportation Plan and the Syracuse City General Plan.

Alternatives E and F are not consistent with the Syracuse City General Plan. The local plans for the area are based upon an improvement of Syracuse Road consistent with its existing alignment and include the commercial development of the area adjacent to the existing Syracuse Road. Alternatives E and F do not follow the existing alignment of Syracuse Road and, therefore, are not consistent with the Syracuse City General Plan, and affect planned land use to the north and south of the corridor.

Town Center Master Plan

A Town Center Master Plan was developed to aid Syracuse City as it changes from a rural community to a major suburban community. The Town Center Master Plan compliments the General Plan. A town center is to be developed around the 2000 West intersection on Syracuse Road (western portion of this project). Alternative F does not follow the Town Center Master Plan because it changes the layout of the intersection at 2000 West.

The guiding philosophy of the Town Center Master Plan includes: recognizable Syracuse City town center core; pedestrian access to the town center; and quality improvements and streetscape with a consistent architectural theme, color, and texture through development and design standards. The Syracuse Town Center Gateway seeks to “create...an impression” that is unique and recognizable and is designed to portray an arrival to Syracuse City and a Gateway to Antelope Island. Trees, historic lighting, and other street amenities along the corridor to greet visitors are anticipated. Syracuse City has indicated that the 90-ft cross-sections are not compatible with its desire for a pedestrian friendly, visually enhanced environment at the entrance of the city, which would include amenities such as benches, landscape, and public areas. An adequate area beyond the curb line is required to allow for the streetscape, landscape, and architectural treatments to develop the desired effect.

Enhance Opportunities to Incorporate Multi-modal Facilities within the Corridor

The 90-ft roadway cross-sections would provide enhancement opportunities for multi-modal facilities. The 90-ft cross-sections would provide 5-ft wide bicycle lanes. The 90-ft cross-sections would not provide continuous shoulders wide enough for buses to pull out of the travel lane at desired locations to allow complete flexibility for bus stop locations (as preferred by UTA), but bus stop locations could be determined and permanent pullout areas could be constructed as part of the project.

Summary of Purpose and Need Evaluation

The evaluation of each alternative’s ability to meet purpose and need resulted in the determination that Alternatives A, B, C, and D would meet all elements of the purpose and need. Alternatives G, H, and I do not provide sufficient capacity to meet 2030 travel demand for east-west travel in northwestern Davis County. Alternatives E, F, G, H, and I are not consistent with Syracuse’s General Plan, and Alternatives F, G, H, and I are not consistent with the Syracuse Town Center Master Plan. Table 5-3 summarizes the results of the purpose and need analysis.

Syracuse City Resolution R04-05

Supplementing this analysis, Syracuse City approved Resolution R04-05 on May 25, 2004, (included in Chapter 8 of this document), which states that Alternatives E and F would create a

hardship to the city. The Resolution indicates that Alternatives E and F would dissect over 50 acres of commercial property, reducing or eliminating the ability for development. This commercial property is located south of Syracuse Road between 1050 West and Allison Way. The land south of this commercial property has been platted as a residential development (Antelope Run Subdivision) and is currently under construction, which eliminates any possibility of shifting the commercial development to the south. Dividing the designated commercial property would change the depth of commercial property from approximately 550 feet to less than 250 feet on either side of the roadway. This would change completely the type of commercial development that could use the property.

The mayor and city council unanimously support a straight alignment for Syracuse Road (Alternatives A, B, C, or D) for the following reasons:

- Conforms to the City's General Plan
- Does not dissect commercial acres
- Still protects properties having most historic importance
- City has been working with commercial developers regarding undeveloped property on the south side of Syracuse Road which would be impacted by Alternatives E and F
- Traffic impacts are better addressed with a straight roadway alignment
- Existing homes would not be left with double fronting lots (having roadways directly in front of and behind the property)
- The historic alignment of Syracuse Road is straight and has been planned for in the City's planning process

Preliminary Evaluation of Environmental Impacts

A preliminary evaluation was performed for Alternatives A through I for the following environmental factors: Economic, Social, Potential Relocations, Pedestrians/Bicyclists, Air Quality, Noise, Water Quality, Cultural Resources, Section 4(f) Properties, Hazardous Waste, and Visual. Of these factors, those most applicable to Syracuse Road are shown in Table 5-5. There was little difference between alternatives in Pedestrians/bicyclists, Air Quality, Water Quality, Hazardous Waste, and Visual factors. Economic and Social impacts were evaluated in additional studies and were determined to differ between alternatives that keep the original Syracuse Road alignment (Alternatives A-D and G-I) and alternatives that move the roadway off of the original alignment (Alternatives E and F), with Alternatives E and F having higher anticipated economic and social impacts (see September 21, 2005 Alternative E Prudence Memo in Chapter 8).

Table 5-5. Partial Summary of Impacts for Preliminary Five-Lane Alternatives.

Alternatives	Economic Impacts ¹	Social Impacts ¹	Total # of Potential Relocations ²	Section 4(f) Use (Adverse Effect)	Section 4(f) Use (No Adverse Effect)	Noise (number of impacted receivers before mitigation)
Alternative A – (110-ft cross-section) Widen Equally About the Centerline	P	P	38	17	16	36
Alternative B – (110-ft cross-section) Widen to the South (No. 1)	P	P	26	13	3	48
Alternative C – (110-ft cross-section) Widen to the South (No. 2)	P	P	25	10	5 ³	52
Alternative D – (110-ft cross-section) Widen to the North	P	P	44	19	2	46
Alternative E – (110-ft cross-section) Section 4(f) Minimization Alternative 1 - Curved Alignment to the South	N	N	17	4	5	29
Alternative F – (110-ft cross-section) Section 4(f) Minimization Alternative 2 - Curved Alignment to South and North	N	N	13	3 (Includes an impact to Founders Park)	7	36
Alternative G – (90-ft cross-section) Widen Equally About the Centerline	P	P	8	6	27	57
Alternative H – (90-ft cross-section) Widen to the South	P	P	20	10	4	42
Alternative I – (90-ft cross-section) Widen to the North	P	P	36	17	4	31

¹ P indicates relatively positive impacts; N indicates relatively negative impacts

² Potential relocations are those that have the proposed R/W within 15 feet of the living area of the building area (excluding porch area and garages). Final determinations about relocations will be determined during right-of-way acquisition (see April 15, 2005 UDOT memo in Chapter 8).

³ The number of "No Adverse Effect" determinations for Alternative C was reduced from five to four through Section 4(f) impact minimization efforts which included narrowing the 10-ft landscape/utility area from a 10-ft strip to a strip varying between 6-ft and 10-ft.

Preliminary Evaluation of Potential Impacts to Section 4(f) Properties

Included in the preliminary evaluation of environmental impacts are the potential impacts to Section 4(f) properties. Federal regulations require special effort to preserve public parks and recreation lands, wildlife refuges, and historic sites. Impacts to Section 4(f) properties are allowed only if there is no prudent and feasible alternative to using that land, and the project includes all possible planning to minimize harm to the Section 4(f) property resulting from the project.

Historic properties eligible under Section 106 of the National Historic Preservation Act (NHPA) of 1966 qualify for Section 4(f) protection if there is a use of such properties as defined in 23 CFR 771.135. "Adverse Effect" and "No Adverse Effect" determinations (terms defined in the Section 106 regulations 36 CFR 800) are used in this document to help the decision makers identify the degree of impacts to Section 4(f) properties (for example, in Table 5-5). Section 4(f) properties within the project area include 33 historic structures and three park/recreation properties (Centennial Park, Founders Park, and Stoker Park).

In order to avoid and minimize impacts to Section 4(f) properties, a preliminary analysis of potential impacts to Section 4(f) properties was performed as part of the development and screening of alternatives (summarized in Table 5-5).

As shown in Table 5-5, Alternative E would have the fewest impacts to Section 4(f) properties (four properties with “adverse effect” Section 106 determinations and five properties with “no adverse effect” Section 106 determinations).

Second Screening Recommendations

The second screening process evaluated compatibility of the alternatives with purpose and need and evaluated preliminary environmental impacts, including impacts to Section 4(f) properties.

From the second screening, the following alternatives were recommended for elimination from further study: Alternative A, Alternative B, Alternative E, Alternative F, Alternative G, Alternative H, and Alternative I. A brief discussion regarding the reasons for each alternative’s elimination from further study is discussed in the following paragraphs.

Alternative A

Although Alternative A would meet all of the purpose and need elements as shown in Table 5-3, it was removed from further study due to the high number of environmental impacts. Alternative A would require 38 residential/commercial potential relocations, the second highest number of potential relocations for Alternatives A through I. Alternative A would leave the roadway right-of-way very close to 26 remaining residences/businesses. In the Community Social Assessment (see Chapter 3), those commenting on potential negative project effects most frequently identified adverse impacts associated with the removal of some homes, loss of yard space, impacts associated with the proximity of the roadway right-of-way to homes not being removed, and reduction in the value of corridor-adjacent residential properties. Alternative A would impact the highest number of historic Section 4(f) resources, requiring the removal of 17 structures and taking right-of-way from another 16 properties.

Alternative B

Although Alternative B would meet all of the purpose and need elements as shown in Table 5-3, it was removed from further study as part of the preliminary evaluation of environmental impacts. Alternative B is very similar to Alternative C. Both would widen Syracuse Road to the South, differing only in the location of transition from south to north toward the west end of the corridor. Alternative B would require one additional potential relocation and would have three more “adverse effect” Section 106 determinations than Alternative C.

Alternative E

Alternative E was removed from further study because it would not meet the “consistent with local plans” element of the Purpose and Need (for complete discussion, see September 21, 2005 Alternative E Prudence Memo in Chapter 8). The Syracuse General Plan provides for major commercial development adjacent to an improved Syracuse Road. Alternative E would interfere with the major commercial development by dividing up the available undeveloped land south of the existing alignment. This land, which has been reserved by Syracuse City for major commercial development, would be limited in the nature and size of potential development. There are no other similar properties within Syracuse suitable for commercial development, including traffic access and exposure. This is a prime commercial area of the utmost importance to the future of Syracuse City.

Syracuse City’s Mayor and City Council expressed opposition to this alternative in Resolution R-04-05. City staff has also repeatedly expressed opposition to any alignment other than existing Syracuse Road. In addition, residents and property owners have expressed opposition at public meetings in which Alternative E was under consideration, with approximately 72 percent opposed to an off-corridor alignment and only 16 percent expressing any support. Alternative E would be unpopular and potentially damaging to property values, as well as to current and future development plans for the area.

This inconsistency with the Syracuse General Plan would have a serious impact on Syracuse City’s ability to meet the needs of the city. Based on sales tax receipts, Syracuse residents currently make approximately 81 percent of their purchases outside Syracuse City. Syracuse City’s goal for the major commercial development is capture more of this sales tax revenue to provide needed city services. The prime commercial properties split by Alternative E near 1000 West would not have sufficient depth to attract major big box retailers. This area would likely still develop commercially, but would not provide the same level of sales tax revenue. A reduction of \$450,000 in city sales tax per year would be anticipated, which represents roughly 35 percent of the sales tax revenue currently collected by the city, and nearly 13 percent of the projected 2006 city budget.

Alternative F

Alternative F was removed from further study because it would not meet the “consistent with local plans” element of the Purpose and Need. Alternative F would have similar impacts as Alternative E. In addition, Alternative F is the only alternative that would impact Founders Park (1500 South 1900 West). Alternative F would take over one acre of property from the park, including 0.17 acres of the parking lot (19 parking stalls), all of the 0.12 acre playground area, 0.35 acres of additional grassy area surrounding the playground, and 0.56 acres of the playing field. Section 4(f) impacts to Founders Park would not be prudent since other feasible and prudent alternatives exist that do not impact the park.

Alternatives G, H, and I

Alternatives G, H, and I were removed from further study because they would not meet elements of the purpose and need for the project (would not meet 2030 travel demand, are not consistent with current standards, including shoulder width and clear zone, are not consistent with state and regional plans, are not consistent with the Syracuse City's plans) and they are not supported by local officials.

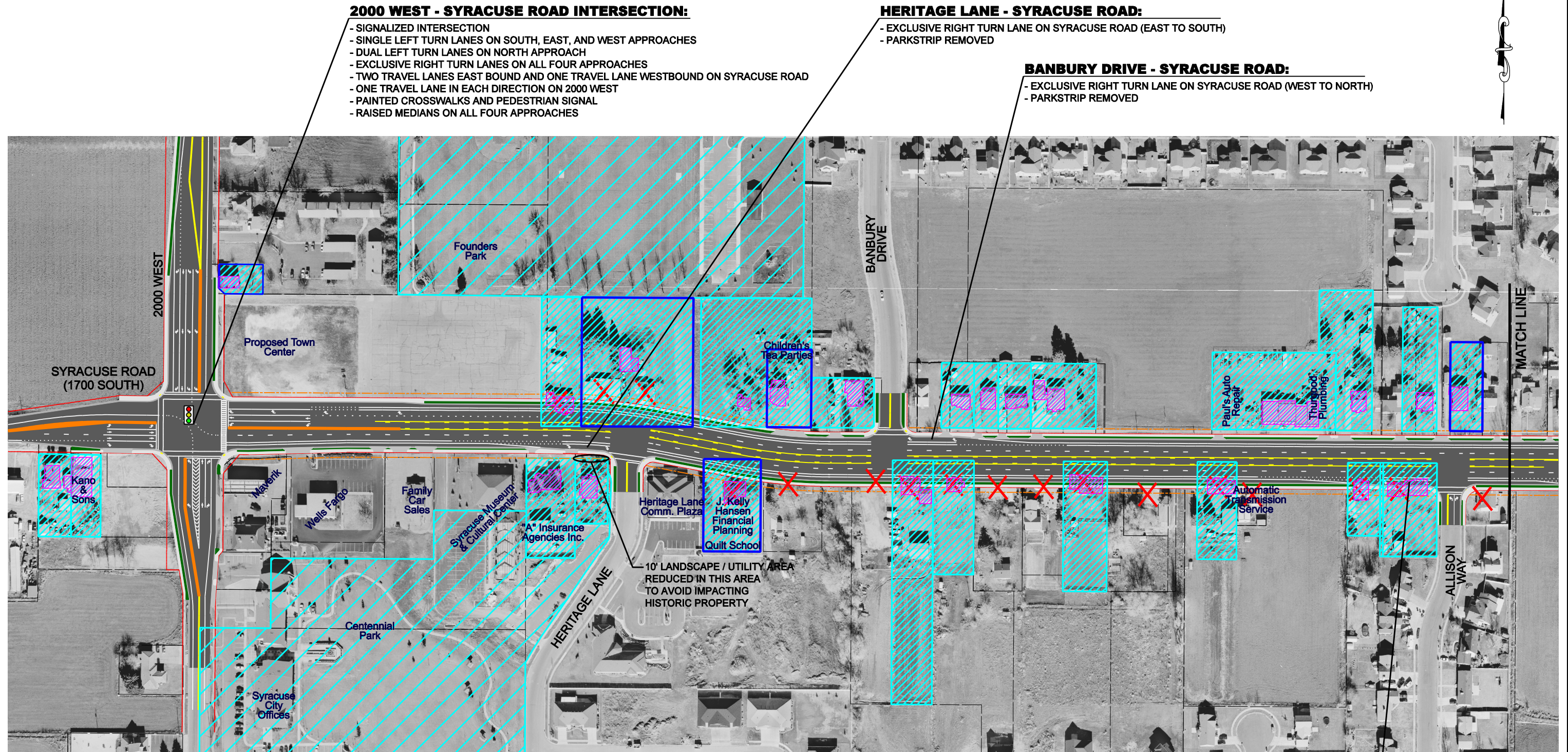
Alternatives G, H, and I would only accommodate 28,975 vpd and would not meet the 2030 travel demand of 30,000 vpd. Alternatives G, H, and I include 5-ft wide shoulders/bike lanes that are narrower than the 8-ft UDOT minimum standard for this type of roadway facility. Additionally, Alternatives G, H, and I would provide a clear zone of only 14 feet which is less than AASHTO's recommended 20 feet and would require a design exception from FHWA.

The 90-ft typical section of Alternatives G, H, and I is not consistent with state and regional plans. WFRM identified a 106-ft right-of-way, and UDOT has planned for the roadway to be improved within a 110-ft right-of-way. Alternatives G, H, and I are not consistent with Syracuse City's Master Transportation Plan and General Plan, which identify a right-of-way width of 106-ft. Also, Syracuse Road to the east has already been constructed within a 106 to 110-ft right-of-way from I-19 to 1000 West, consistent with local, state and regional plans.

Syracuse City has indicated that Alternatives G, H, and I are not compatible with its Town Center Master Plan and would not result in a pedestrian-friendly, visually enhanced environment at the entrance of the city.

Alternatives Selected for Detailed Study

Alternatives selected for detailed study include the No-action Alternative, Alternative C – Widen to the South (No. 2) (see Figure 5-6 and Figure 5-7), and Alternative D – Widen to the North (see Figure 5-8 and Figure 5-9).



LEGEND:

- SECTION 4(f) PROPERTY BOUNDARY
- SECTION 4(f) HISTORIC STRUCTURE
- LOCALLY IMPORTANT HISTORIC STRUCTURES
- POTENTIAL RELOCATION
- PROPOSED RIGHT-OF-WAY
- LANDSCAPE / UTILITY AREA OR EASEMENT
- RECOMMENDED RAISED MEDIAN
- TRAFFIC SIGNAL

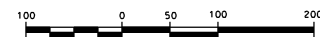
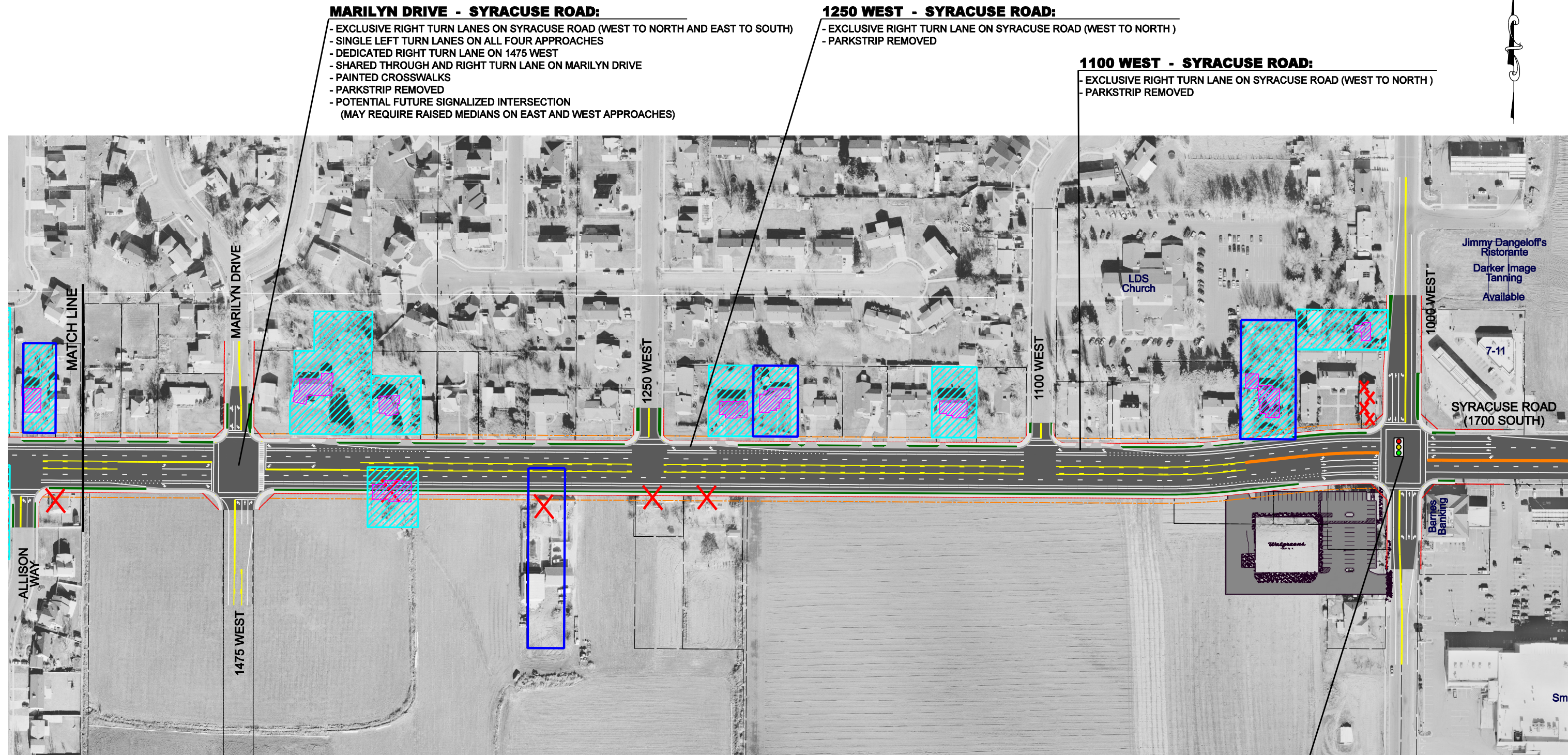


FIGURE 5-6
ALTERNATIVE C
WIDEN TO THE SOUTH (NO. 2)



MARILYN DRIVE - SYRACUSE ROAD:

- EXCLUSIVE RIGHT TURN LANES ON SYRACUSE ROAD (WEST TO NORTH AND EAST TO SOUTH)
- SINGLE LEFT TURN LANES ON ALL FOUR APPROACHES
- DEDICATED RIGHT TURN LANE ON 1475 WEST
- SHARED THROUGH AND RIGHT TURN LANE ON MARILYN DRIVE
- PAINTED CROSSWALKS
- PARKSTRIP REMOVED
- POTENTIAL FUTURE SIGNALIZED INTERSECTION (MAY REQUIRE RAISED MEDIANS ON EAST AND WEST APPROACHES)

1250 WEST - SYRACUSE ROAD:

- EXCLUSIVE RIGHT TURN LANE ON SYRACUSE ROAD (WEST TO NORTH)
- PARKSTRIP REMOVED

1100 WEST - SYRACUSE ROAD:

- EXCLUSIVE RIGHT TURN LANE ON SYRACUSE ROAD (WEST TO NORTH)
- PARKSTRIP REMOVED

SYRACUSE ROAD:

- 110-FT. OF RIGHT OF WAY:
 - TWO 12-FT. TRAVEL LANES IN EACH DIRECTION
 - 14-FT. TWO-WAY LEFT-TURN LANE
 - 12-FT. SHOULDERS (INCLUDES 5-FT. STRIPED & SIGNED BICYCLE LANE)
 - CURB AND GUTTER
 - 3.5-FT. PARKSTRIPS
 - 6-FT. SIDEWALKS
- 10-FT. LANDSCAPE / UTILITY AREA (NORTH SIDE - BETWEEN 1000 W. AND 1782 W. SOUTH SIDE - BETWEEN HERITAGE LANE AND 2000 WEST)
- 10-FT. LANDSCAPE / UTILITY AREA (EASEMENT) (NORTH SIDE - BETWEEN 1782 W. AND 2000 W. SOUTH SIDE - BETWEEN 1000 W. AND HERITAGE LANE)
- STREET LIGHTING (DECORATIVE LIGHTING MAY REQUIRE COST PARTICIPATION BY THE CITY)

1000 WEST - SYRACUSE ROAD INTERSECTION:

- SIGNALIZED INTERSECTION
- SINGLE LEFT TURN LANES ON ALL FOUR APPROACHES
- EXCLUSIVE RIGHT TURN LANES ON ALL FOUR APPROACHES
- TWO TRAVEL LANES IN EACH DIRECTION ON SYRACUSE ROAD
- ONE TRAVEL LANE IN EACH DIRECTION ON 1000 WEST
- PAINTED CROSSWALKS AND PEDESTRIAN SIGNAL
- RAISED MEDIANS ON EAST AND WEST APPROACHES

LEGEND:

- SECTION 4(f) PROPERTY BOUNDARY
- SECTION 4(f) HISTORIC STRUCTURE
- LOCALLY IMPORTANT HISTORIC STRUCTURES
- POTENTIAL RELOCATION
- PROPOSED RIGHT-OF-WAY
- LANDSCAPE / UTILITY AREA OR EASEMENT
- RECOMMENDED RAISED MEDIAN
- TRAFFIC SIGNAL

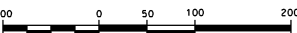
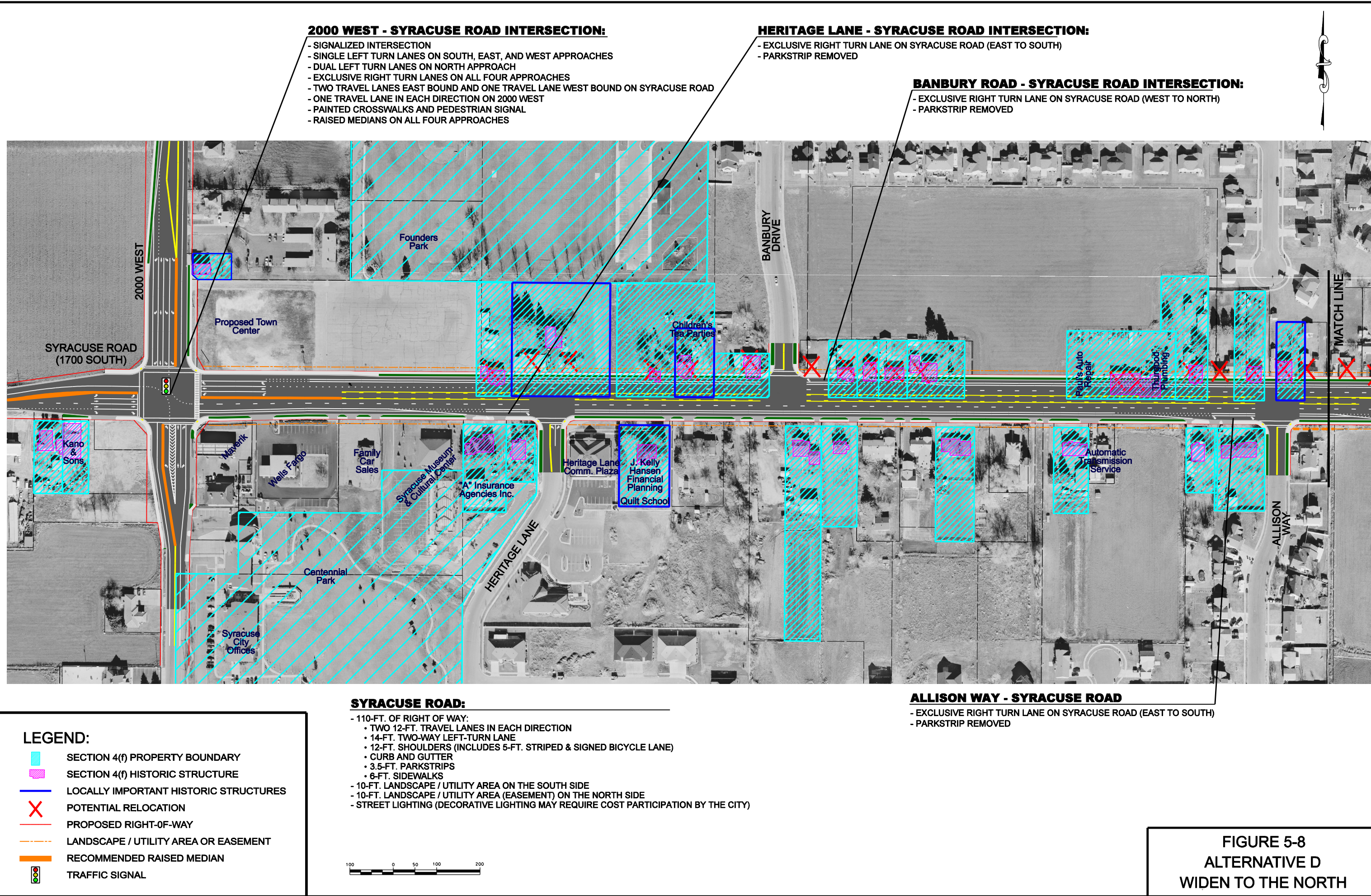
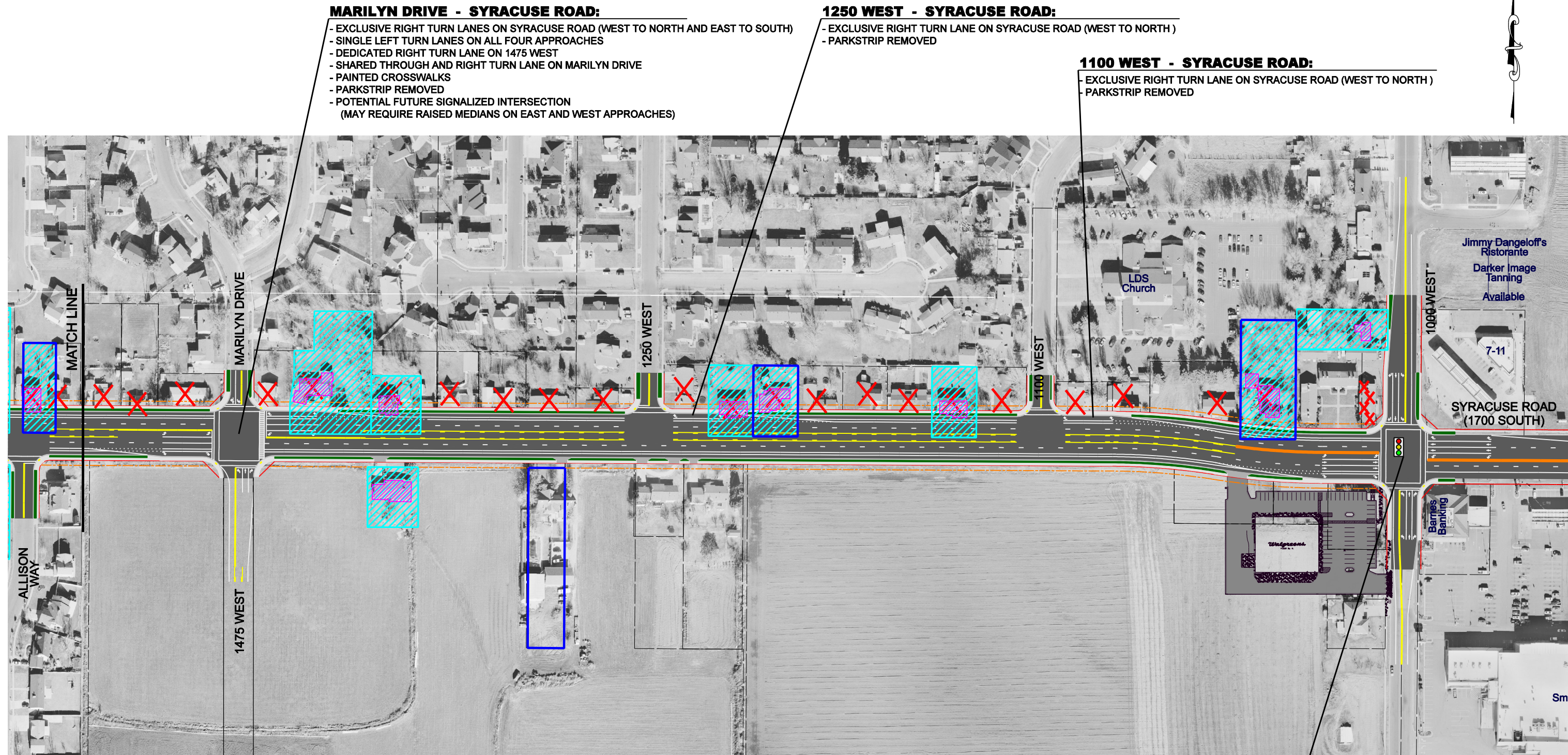


FIGURE 5-7
ALTERNATIVE C
WIDEN TO THE SOUTH (NO. 2)





MARILYN DRIVE - SYRACUSE ROAD:

- EXCLUSIVE RIGHT TURN LANES ON SYRACUSE ROAD (WEST TO NORTH AND EAST TO SOUTH)
- SINGLE LEFT TURN LANES ON ALL FOUR APPROACHES
- DEDICATED RIGHT TURN LANE ON 1475 WEST
- SHARED THROUGH AND RIGHT TURN LANE ON MARILYN DRIVE
- PAINTED CROSSWALKS
- PARKSTRIP REMOVED
- POTENTIAL FUTURE SIGNALIZED INTERSECTION (MAY REQUIRE RAISED MEDIANS ON EAST AND WEST APPROACHES)

1250 WEST - SYRACUSE ROAD:

- EXCLUSIVE RIGHT TURN LANE ON SYRACUSE ROAD (WEST TO NORTH)
- PARKSTRIP REMOVED

1100 WEST - SYRACUSE ROAD:

- EXCLUSIVE RIGHT TURN LANE ON SYRACUSE ROAD (WEST TO NORTH)
- PARKSTRIP REMOVED

LEGEND:

- SECTION 4(f) PROPERTY BOUNDARY
- SECTION 4(f) HISTORIC STRUCTURE
- LOCALLY IMPORTANT HISTORIC STRUCTURES
- POTENTIAL RELOCATION
- PROPOSED RIGHT-OF-WAY
- LANDSCAPE / UTILITY AREA OR EASEMENT
- RECOMMENDED RAISED MEDIAN
- TRAFFIC SIGNAL

SYRACUSE ROAD:

- 110-FT. OF RIGHT OF WAY:
 - TWO 12-FT. TRAVEL LANES IN EACH DIRECTION
 - 14-FT. TWO-WAY LEFT-TURN LANE
 - 12-FT. SHOULDERS (INCLUDES 5-FT. STRIPED & SIGNED BICYCLE LANE)
 - CURB AND GUTTER
 - 3.5-FT. PARKSTRIPS
 - 6-FT. SIDEWALKS
- 10-FT. LANDSCAPE / UTILITY AREA ON THE SOUTH SIDE
- 10-FT. LANDSCAPE / UTILITY AREA (EASEMENT) ON THE NORTH SIDE
- STREET LIGHTING (DECORATIVE LIGHTING MAY REQUIRE COST PARTICIPATION BY THE CITY)

1000 WEST - SYRACUSE ROAD INTERSECTION:

- SIGNALIZED INTERSECTION
- SINGLE LEFT TURN LANES ON ALL FOUR APPROACHES
- EXCLUSIVE RIGHT TURN LANES ON ALL FOUR APPROACHES
- TWO TRAVEL LANES IN EACH DIRECTION ON SYRACUSE ROAD
- ONE TRAVEL LANE IN EACH DIRECTION ON 1000 WEST
- PAINTED CROSSWALKS AND PEDESTRIAN SIGNAL
- RAISED MEDIANS ON EAST AND WEST APPROACHES

FIGURE 5-9
ALTERNATIVE D
WIDEN TO THE NORTH

5.2 IDENTIFICATION OF SECTION 4(F) PROPERTIES

This section discusses resources identified within the Syracuse Road corridor that would qualify for Section 4(f) protection if there were determined to be a “use” by the project as that term is defined in 23 CFR 771.135(p). Section 4(f) properties identified within the project area include recreational facilities and historic structures.

5.2.1 Parks and Recreational Areas

Three parks are located within or near the project area (see Figure 5-10).

- Founders Park, located at 1500 South 1900 West, has a bowery, baseball and softball fields, football field, skate park, picnic tables, and playground equipment.
- Centennial Park, located at 1800 South 2000 West, has a walking path, volleyball court, shelters, and playground equipment.
- Stoker Park, located at 1575 South 1100 West, has tennis courts, volleyball courts, bowery, picnic tables, and playground equipment.

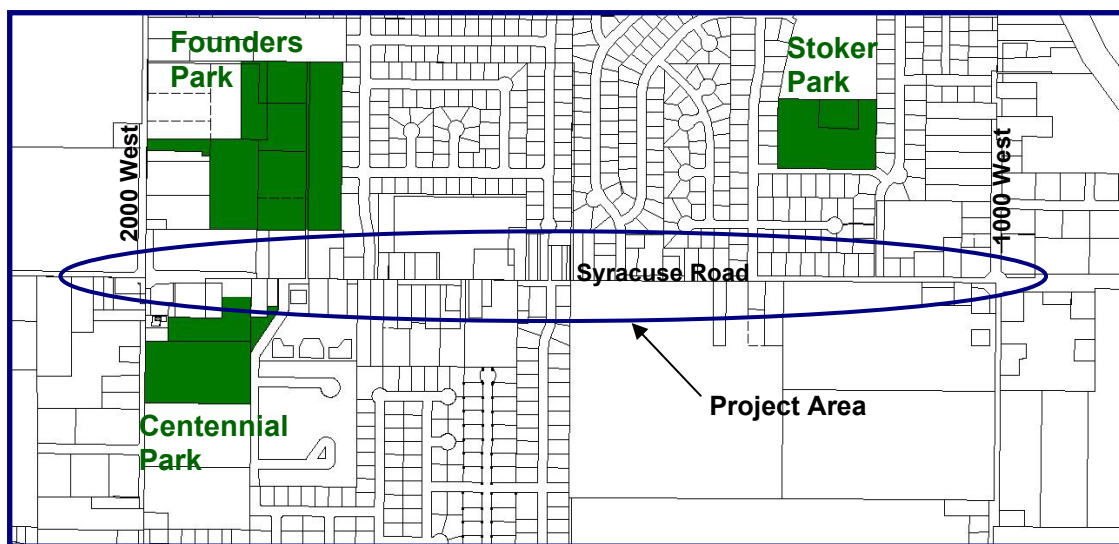


Figure 5-10. Syracuse City Parks Map.

No publicly owned wildlife or waterfowl refuges exist within the project area. There are no Section 6(f) resources along the Syracuse Road Corridor¹ (see July 12, 2004 letter in Chapter 8).

¹ Section 6(f) refers to the Land and Water Conservation Fund Act (LWCFA) of 1965, which provides funding for acquiring property and developing public recreational facilities. Section 6(f) provides protection for property purchased with LWCFA money. Specifically, Section 6(f) states that “no property acquired or developed with assistance under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses.”

5.2.2 Planned Trails along Syracuse Road

The WFRC Bicycle Plan (see Figure 1-4) calls for a Class II bicycle route (a striped and signed bicycle lane for travel on the roadway) along Syracuse Road. All build alternatives incorporate a Class II bicycle lane in their design (currently Syracuse Road has no bicycle lane). Section 4(f) applicability is discussed below.

Planned Bikeways along Syracuse Road - FHWA's Section 4(f) Policy Paper (*FHWA Section 4(f) Policy Paper, question 15*) states that if a bikeway is primarily used for transportation and is an integral part of the local transportation system, the requirements of Section 4(f) would not apply. Goal I of the WFRC is to provide a balanced, interconnected transportation system, with a range of convenient, efficient, and economical choices. The objective is to provide a system with alternative transportation modes, including bicycle, to move people through the region. WFRC's Bicycle Plan is consistent with The Statewide Pedestrian and Bicycle Plan, which is an element of the Statewide Long Range Transportation Plan (approved February 2001). The goal of this plan is to construct and maintain bicycle facilities that meet current and expected needs for non-motorized travel and encourage increased non-motorized travel, including access to transit systems. Therefore, Section 4(f) does not apply to the bikeway planned along Syracuse Road because the primary purpose of these routes is transportation, not recreation.

5.2.3 Historic Properties

Section 4(f) protection applies to resources on or eligible for the National Register of Historic Places (NRHP). To identify historic resources, a Reconnaissance Level Survey (RLS) was conducted by a certified historic preservation consultant (see Section 3.15 - Cultural Resources in Chapter 3 for a more detailed discussion). The Advisory Council on Historic Preservation (ACHP) regulations (36 CFR 800) define a "historic property" as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places." This definition is used throughout the remainder of this chapter. Table 5-6 shows the NRHP eligibility criteria. To provide a broad context for evaluating individual historic resources, all resources greater than 45 years of age within Syracuse City, including those along the project corridor, were evaluated for NRHP eligibility (see Table 5-8).

23 CFR 771.135(e)

In determining the application of section 4(f) to historic sites, the Administration, in cooperation with the applicant, will consult with the State Historic Preservation Officer (SHPO) and appropriate local officials to identify all properties on or eligible for the National Register of Historic Places (National Register). The section 4(f) requirements apply only to sites on or eligible for the National Register unless the Administration determines that the application of section 4(f) is otherwise appropriate.

Table 5-6. NRHP Criteria for Evaluation.

NRHP Criterion	Characteristics
A	Associated with events that have made a significant contribution to the broad patterns of our history
B	Associated with the lives of persons significant in our past
C	Embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction
D	Yielded, or may likely to yield, information important in prehistory or history

In the RLS, properties were evaluated based on the Utah State Historic Preservation Office (SHPO) Ratings shown in Table 5-7. Historic resources along the project corridor identified in the RLS are shown in Table 5-8.

Table 5-7. Utah SHPO Rating Definitions for Historic Structures.


SHPO Rating	Characteristics
A	Eligible/Significant: Built within the historic period and retains integrity; excellent example of a style or type; unaltered or only minor alterations or additions; individually eligible for NRHP under Criterion C; also, buildings of known historical significance.
B	Eligible: Built within a historic period and retains integrity; good example of a style or type, but not as well-preserved or well-executed as “A” buildings; more substantial alterations or additions than “A” buildings, though overall integrity is retained; eligible for NRHP as part of a potential historic district or primarily for historical rather than architectural reasons (which cannot be determined at this point).
C	Ineligible: Built during the historic period but has had major alterations or additions; no longer retains integrity.
D	Ineligible: Out-of-period; built during the modern era.

Since the completion of the RLS, three historic structures (1071 West 1700 South, 1037 West 1700 South, and 1013 West 1700 South) have been removed by the owners. These properties are no longer considered eligible for inclusion onto the NRHP, since the historic structures located on them have been removed and the property no longer retains any historic value. It should be noted that these historic houses were removed by other individuals and not as part of the Syracuse Road project.

Nine structures in and around the project area have been identified as being of local importance by the Syracuse Museum Foundation (see letter dated July 29, 2004 in Chapter 8). One of these structures (1275 South 2000 West) is outside of the project area and does not need to be evaluated for Section 4(f) use. Of the remaining eight structures, five structures were identified as eligible for the NRHP by the RLS under Criterion C and are therefore assumed eligible for Section 4(f) protection. Two structures (1206 West 1700 South and 1797 West 1700 South) received a SHPO Rating of C and are therefore ineligible for the NRHP under Criterion C; however, because of their association with persons significant in local history, these two properties are eligible for the NRHP under Criterion B. The structure at 1327 West 1700 South

was not evaluated in the RLS, since extensive modifications made to the exterior of the original structure have rendered unrecognizable the qualities that would have made it eligible for the NRHP. After Syracuse City identified the structure at 1327 West 1700 South as having local historical importance, the structure was re-evaluated. Based on the re-evaluation, 1327 West 1700 South was determined by FHWA as not meeting any of the NRHP criteria due to its extensive modifications and limited historic significance.

Table 5-8. Results of the RLS.

Address	Photos of Eligible Structures	Date (ca.)	Style	Utah SHPO Rating	Locally Important (Yes/No)	NRHP Criterion	Section 4(f) Applicability
1655 South 2000 West		1926	20 th Century Commercial	A	Yes	Eligible: A, C	Applicable
2057 West 1700 South		1926	Period Revival: Other	A	No	Eligible: C	Applicable
2047 West 1700 South		1926	20 th Century Commercial	B	No	Eligible: C	Applicable
1867 West 1700 South		1950	Ranch/Rambler	B	No	Eligible: C	Applicable
1862 West 1700 South		1948	Minimal Traditional	B	No	Eligible: C	Applicable
1860 West 1700 South		1930	Bungalow	C	No	Ineligible	Not Applicable
1851 West 1700 South		1926	Colonial Revival	B	No	Eligible: C	Applicable
1848 West 1700 South		1900	Vernacular	A	Yes	Eligible: A, C	Applicable
1828 West 1700 South		1910	20 th Century: Other	C	No	Ineligible	Not Applicable
1797 West 1700 South		1913	20 th Century: Other	C	Yes	Eligible: B	Applicable
1792 West 1700 South		1946	20 th Century: Other Vernacular	B	No	Eligible: C	Applicable
1782 West 1700 South		1909	Victorian Eclectic	B	Yes	Eligible: B, C	Applicable
1752 West 1700 South		1920	Bungalow	A	No	Eligible: C	Applicable
1741 West 1700 South		1918	Classical: Other	C	No	Ineligible	Not Applicable
1729 West 1700 South		1958	Early Ranch	B	No	Eligible: C	Applicable
1724 West 1700 South		1930	Minimal Traditional	C	No	Ineligible	Not Applicable

Address	Photos of Eligible Structures	Date (ca.)	Style	Utah SHPO Rating	Locally Important (Yes/No)	NRHP Criterion	Section 4(f) Applicability
1711 West 1700 South		1937	Minimal Traditional	B	No	Eligible: C	Applicable
1708 West 1700 South		1910	Bungalow Period Revival: Other	B	No	Eligible: C	Applicable
1698 West 1700 South		1900	Victorian Eclectic	B	No	Eligible: C	Applicable
1688 West 1700 South		1953	Ranch/Rambler	B	No	Eligible: C	Applicable
1679 West 1700 South		1950	Early Ranch	C	No	Ineligible	Not Applicable
1674 West 1700 South		1954	Early Ranch	B	No	Eligible: C	Applicable
1661 West 1700 South		1956	Ranch/Rambler	B	No	Eligible: C	Applicable
1637 West 1700 South		1914	Bungalow	C	No	Ineligible	Not Applicable
1609 West 1700 South		1954	Early Ranch	B	No	Eligible: C	Applicable
1597 West 1700 South		1950	20 th Century: Other	C	No	Ineligible	Not Applicable
1578 West 1700 South		1940	20 th Century Commercial	B	No	Eligible: C	Applicable
1558 West 1700 South		1942	Minimal Traditional	B	No	Eligible: C	Applicable
1557 West 1700 South		1947	World War II Era Cottage	B	No	Eligible: C	Applicable
1546 West 1700 South		1947	Ranch/Rambler	C	No	Ineligible	Not Applicable
1533 West 1700 South		1958	Early Ranch	B	No	Eligible: C	Applicable
1532 West 1700 South		1948	Minimal Traditional	A	No	Eligible: C	Applicable
1518 West 1700 South		1913	Bungalow	B	Yes	Eligible: C	Applicable
1506 West 1700 South		1930	Ranch/Rambler	C	No	Ineligible	Not Applicable
1492 West 1700 South		1900	Victorian: Other	C	No	Ineligible	Not Applicable
1478 West 1700 South		1920	Classical: Other	C	No	Ineligible	Not Applicable

Address	Photos of Eligible Structures	Date (ca.)	Style	Utah SHPO Rating	Locally Important (Yes/No)	NRHP Criterion	Section 4(f) Applicability
1412 West 1700 South		1955	Ranch/Rambler	B	No	Eligible: C	Applicable
1384 West 1700 South		1949	World War II Era Cottage	B	No	Eligible: C	Applicable
1379 West 1700 South		1957	Ranch/Rambler	B	No	Eligible: C	Applicable
1358 West 1700 South		1910	20 th Century: Other	C	No	Ineligible	Not Applicable
1224 West 1700 South		1951	Ranch/Rambler	B	No	Eligible: C	Applicable
1206 West 1700 South		1907	20 th Century: Other	C	Yes	Eligible: B	Applicable
1136 West 1700 South		1945	Early Ranch	B	No	Eligible: C	Applicable
1102 West 1700 South		1946	Early Ranch	C	No	Ineligible	Not Applicable
1071 West 1700 South		1949	Minimal Traditional - Structure removed by owner	---	No	NA	NA
1048 West 1700 South		1921	Bungalow	B	Yes	Eligible: B, C	Applicable
1037 West 1700 South		1949	Minimal Traditional - Structure removed by owner	---	No	NA	NA
1013 West 1700 South		1929	Bungalow - Structure removed by owner	---	No	NA	NA
1654 South 1000 West		1930	20 th Century: Other	B	No	Eligible: C	Applicable

As shown in Table 5-8, the results of the RLS identified 33 historic properties along the Syracuse Road corridor applicable to Section 4(f). Twenty seven of these properties are eligible under NRHP Criterion C, two are eligible under both Criterion A and C, two are eligible under both Criterion B and C, and two are eligible under Criterion B. Of these 33 properties, five received a SHPO Rating of A, 26 received a B Rating, and two received a C Rating. The SHPO has concurred with the evaluation of these 33 properties as documented in the Determination of Eligibility and Finding of Effect (DOEFOE) found in **Appendix C**. These properties are shown in Figure 5-11 and are described in the following paragraphs. The descriptions include the basis for the SHPO Rating of each structure.



1655 South 2000 West

There is very little change to this brick One-Part Block Commercial Building. Constructed in 1926 as the Modern Cash Market, it served as one of the community's stores for more than 50 years. Built between the LDS Church and the schoolhouse, the market was at the center of town. The building retains original windows and doors and is important not only architecturally, but to the business and social history of Syracuse as well. The site is eligible for the NRHP under Criteria A and C and has a SHPO Rating of A. This property has also been designated as Locally Important.

**2057 West 1700 South**

This Period Revival Bungalow was constructed in 1926 for Eugene and Hazel Tolman in connection with their business immediately to the east of the house. The house is covered with asbestos siding, which may or may not be original, but is certainly from the historic period. The house retains all original windows and is eligible for the NRHP under Criterion C with a SHPO Rating of A. It is important to the historic architecture of Syracuse, especially when coupled with the business next door.

**2047 West 1700 South**

This Twentieth Century Commercial Bay style building was constructed of oversized brick in 1926. Built by Eugene and Hazel Tolman (who also built the house next door), it was originally the Tolman Blacksmith Shop, later adapted to the Tolman Auto Shop. Constructed of oversized brick, the building has several slight alterations, which include the enclosing of several bays. The original openings of these bays are still visible. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B. The building is also important to the business history of Syracuse, especially when coupled with the adjoining family home.



1867 West 1700 South

This ranch style house with a garage was constructed in 1950 of brick and is currently used as a commercial building. The house retains all original windows. The only alterations to the structure are the addition of an aluminum awning and the enclosure of the garage into living space. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B because the opening in the garage remains intact.

**1862 West 1700 South**

Built in 1948 for Carl and Ruby Barber, this World War II Era Cottage was built in front of an existing house. The windows in this striated brick house have been replaced but are in the original openings. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to slight alterations.

**1851 West 1700 South**

This small Colonial Revival Bungalow was constructed in 1926. While it still retains the original windows and drop siding in the front portion of the house, there are additions to the rear of the house, most during the historic period. The house now has a metal roof, but these alterations do not substantially affect the integrity of the house. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B.



1848 West 1700 South

The original home on this property was destroyed by fire and replaced in the 1960s. However, in the rear of the house is the Bountiful Lumber Building, which was constructed at another location in 1900. Originally located at 2000 West and 1700 South, the building was moved to this location in 1947 by Lloyd Dahl to use for his plumbing business. The Vernacular style, one-part commercial block building still retains its original windows and plank siding. The property is eligible for the NRHP under Criterion A and C with a SHPO Rating of A because of its importance to the architectural history and broad patterns of history in Syracuse. This property has also been designated as Locally Important.



1797 West 1700 South

This structure was built in 1913 by Daniel Walker. It is one of the oldest standing homes in Syracuse. It is currently used as a commercial building. Daniel was a member of the group that formed a co-op called the Syracuse Mercantile Company. This group constructed a new grocery and hardware store in the middle of town at 1700 South and 2000 West in the early 1900's. Daniel was one of 12 local men to promote and organize the construction of the second canning factory in Davis County, built in 1893. The property is eligible for the NRHP under Criterion B with a SHPO Rating of C. This property has been designated as Locally Important.



1792 West 1700 South

This Twentieth Century vernacular style building was constructed in 1946. The house is covered with the original asbestos siding and retains all original windows. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to the condition of the house and its more recent construction.

**1782 West 1700 South**

Constructed of brick in 1909, this Victorian Eclectic Crosswing was the second home of Thomas and Elizabeth Thurgood. Thurgood served as the first president of the Syracuse Town Board from 1935-1948, while living in this house. The structure is currently used as both a residence and a business. The property is eligible for the NRHP under Criterion B and C with a SHPO Rating of B due to the replacement of original windows. The house is important due to its association with Thurgood. This property has also been designated as Locally Important.

**1752 West 1700 South**

This brick Bungalow has had very little alteration since its construction in 1920 for Earl and Eveline Dahl. The house retains all original windows, and the only alteration is an aluminum awning added on the west, front portion of the house. There is a contributing chicken coop and garage on the property as well. The property is eligible for the NRHP under Criterion C with a SHPO Rating of A.



1729 West 1700 South

This 1958 Early Ranch style house with a garage was constructed of striated brick. The garage is attached to the east side of the house by a breezeway, which has been enclosed for living space. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to the more recent age of the building and the enclosure of the breezeway.

**1711 West 1700 South**

Built in 1937, this vernacular style World War II Era Cottage was constructed of drop siding. While some of the original windows have been replaced, they are in the original openings. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to slight alterations.

**1708 West 1700 South**

This Period Revival Bungalow was constructed of narrow clapboard siding in 1910. The front porch of the house was enclosed, but within the historic period, and is covered with a wider siding. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to slight alterations.



1698 West 1700 South

This small Victorian Eclectic foursquare was constructed around 1900. While portions of the house retain the original drop siding, other portions have been covered with vinyl siding. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to the retention of original windows and the look and feel of the building

**1688 West 1700 South**

This Ranch style house was built in 1953. Constructed of striated brick and board and batten siding, the house (what can be seen of it through the shrubs) appears to retain architectural integrity. The board and batten siding on the front porch area is suspect, although alterations to the original architecture are not clearly apparent. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B.

**1674 West 1700 South**

This brick, Early Ranch style house was constructed in 1954. The separate garage, which is original, is attached to the house by a breezeway. The original windows have been replaced, but within the same openings. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B.



1661 West 1700 South

This 1956 Ranch style house was constructed of striated brick. A single-car garage is attached to the west side of the house by a breezeway. There is no visible change to the original architecture of the house. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to its more recent age and the commonness of the type of building.

**1609 West 1700 South**

The Early Ranch style house with a garage was constructed in 1954 of striated brick. Alterations to the original architecture include a tile roof and the replacement of windows within the same opening. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to slight alterations.

**1578 West 1700 South**

Built in 1940 as the Roy Miya Garage, this commercial arcaded block is constructed of striated brick. Other than original windows being replaced within the same openings, there are very few changes to the original construction of this building, which still houses two businesses. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B.



1558 West 1700 South

This Minimal Traditional style World War II Era Cottage was constructed for Ira and Ruby Thurgood in 1942. Both the house and the detached garage are constructed of striated brick. The house retains all original windows, and the only alterations are the aluminum awnings and an aluminum storm door (both of which are easily removed). The property is eligible for the NRHP under Criterion C with a SHPO Rating of B.

**1557 West 1700 South**

Constructed in 1947, this striated brick World War II Era Cottage has a separate garage of striated brick as well. While the original windows in this house have been replaced, the new windows are in the same openings. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B.

**1533 West 1700 South**

This Early Ranch style house with a garage was constructed of striated brick in 1958. A two-door garage is connected to the west side of the house by a breezeway. Alterations to this house include a fence across the breezeway and a wooden ramp to the front porch (both of which are easily removed); the original windows have been replaced in the same openings. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to slight alterations.



1532 West 1700 South

Constructed of brick in 1948, this Minimal Traditional style World War II Era Cottage retains its architectural integrity. All original windows are intact, as well as the wood siding under the eaves. The property is eligible for the NRHP under Criterion C with a SHPO Rating of A.

**1518 West 1700 South**

This Foursquare, early Bungalow style house was constructed of brick in 1913 for Joseph and Regina Hansen. The brick has been painted, and new vinyl porch posts and railings have been added to the house. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to slight alterations. This property has also been designated as Locally Important.

**1412 West 1700 South**

Although this Ranch style house with a garage still retains all the original materials (oversized brick and wood siding) from its 1955 construction, the house is in poor condition for its age. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B.



1384 West 1700 South

This brick World War II Era Cottage was constructed in 1949. The original windows in the house have been replaced, but within the same openings. Aluminum awnings have been added above the front windows as well, but neither of these changes substantially alters the architectural integrity of the house. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B.

**1379 West 1700 South**

Built in 1957, this Ranch style house with a garage is constructed of striated brick. The house has all original materials, including the garage door, and retains its historic integrity. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to its more recent age and the commonness of the style.

**1224 West 1700 South**

This Ranch style house with garage was constructed of striated brick in 1951. The eaves of the house, which were originally wood, have been covered with vinyl siding but lend the same character and feel to the original architecture. Because the house is mostly brick, the alteration of the siding does not substantially affect the architectural integrity of the house. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B.



1206 West 1700 South

This brick home was built in 1907 by John Lamont and Pearl Cox Stoker. John owned and operated his own farm, which was part of his father's (Alma Stoker) original homestead. John had a large dairy herd and never traveled far from home because he always had chores to do and cows to milk twice a day. John Stoker was a member of the board of directors for the West Branch Irrigation Company. The property is eligible for the NRHP under Criterion B with a SHPO Rating of C. The structure has been modified with additions, windows, and exterior tile. This property has been designated as Locally Important.

**1136 West 1700 South**

This Early Ranch/Rambler type house was constructed of striated brick in 1945. While the shutters near the windows and the carport on the west are likely additions to the house, they do not drastically alter the architectural integrity of the house. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B.

**1048 West 1700 South**

Constructed for Alma and Jean Stoker in 1921, this brick bungalow is difficult to see in photographs due to numerous trees in front. While there is a small addition on the rear of the house, and the windows have been replaced in the original openings, these changes do not substantially alter the architectural integrity of the house. The property is eligible for the NRHP under Criterion B and C with a SHPO Rating of B. This property has also been designated as Locally Important.



1654 South 1000 West

This house was constructed in 1930 of drop siding. Although the plan is similar to a Hall/Parlor type house, the placement of the windows and lack of *any* defined style make it more of a vernacular type building. The original windows have been replaced, but the window openings remain intact. The property is eligible for the NRHP under Criterion C with a SHPO Rating of B due to slight alterations.



5.3 ANALYSIS OF IMPACTS TO SECTION 4(F) PROPERTIES AND DETERMINATION OF “USE”

This section evaluates what impacts, if any, are associated with the build alternatives on each of the resources identified in the previous section, and, based on this analysis, determines whether a Section 4(f) “use” would occur, as defined in 23 CFR 771.135.

The alternatives development and screening process was guided by representatives from Syracuse City, UDOT, and FHWA. Representatives of the city and agencies have met regularly since the beginning of this project to assist in selecting an alternative that is feasible and prudent while minimizing environmental impacts. Section 4(f) impacts were carefully considered in the alternative development phase of the EIS. A complete discussion of alternatives considered for this project is found in Chapter 2.

Use (23 CFR 771.135(p)(1))

- (i) When land is permanently incorporated into a transportation facility
- (ii) When there is a temporary occupancy of land that is adverse in terms of the statute's preservationist purposes as determined by the criteria in paragraph (p)(7) of this section.
- (iii) When there is a constructive use of land [when the transportation project does not incorporate land from a section 4(f) resource, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the resource are substantially diminished]

5.3.1 Project Alternatives

As described in Section 5.1, two build alternatives were identified that meet the purpose and need for the project. These alternatives are discussed below.

Alternative C

The proposed cross-section would be 110-ft wide, except at 2000 West where the cross-section would be about 116.5-ft to accommodate exclusive turning lanes. The proposed typical section includes two 12-ft travel lanes in each direction, 12-ft shoulders (including a 5-ft bicycle lane), a 14-ft two-way left-turn lane, 2.5-ft curb and gutter, 3.5-ft parkstrips, and 6-ft sidewalks on both sides (see Figure 5-6 and Figure 5-7). This alternative widens to both north and south at the

1000 West intersection, widens to the south between 1050 West and 1750 West, and widens to the north between 1750 West and 2000 West.

Alternative D

The proposed cross-section would be 110-ft wide, except at 2000 West, where the cross-section would be about 116.5-ft to accommodate exclusive turning lanes. The proposed typical section includes two 12-ft travel lanes in each direction, 12-ft shoulders (including a 5-ft bicycle lane), a 14-ft two-way left-turn lane, 2.5-ft curb and gutter, 3.5-ft parkstrips, and 6-ft sidewalks on both sides (see Figure 5-8 and Figure 5-9). This alternative widens to both north and south at the 1000 West intersection, and then widens to the north between 1050 West and 2000 West.

5.3.2 Parks and Recreational Areas

This section discusses the impacts on parks and recreational areas within or near the project study area resulting from the build alternatives to determine if a Section 4(f) “use” would occur.

Founders Park

Right-of-way would not be required from Founders Park by Alternative C or Alternative D. The Park is located approximately 200 feet north of both alternatives. The limits of the park are shown on Figure 5-10. Alternatives C and D would not result in a Section 4(f) “use” of this park property.

Centennial Park

Right-of-way would not be required from Centennial Park by Alternative C or Alternative D. The Park is located approximately 100 feet south of both alternatives. The limits of the park are shown on Figure 5-10. Alternatives C and D would not result in a Section 4(f) “use” of this park property.

Stoker Park

Right-of-way would not be required from Stoker Park by Alternative C or Alternative D. The Park is located approximately 700 feet north of both alternatives. The limits of the park are shown on Figure 5-10. Alternatives C and D would not result in a Section 4(f) “use” of this park property.

5.3.3 Historic Properties

Impacts to historic properties were documented using the Section 106 guidelines as presented in 36 CFR 800.5 and were categorized by the Section 106 criteria as *No Effect*, *No Adverse Effect*, or *Adverse Effect*. The types of impacts from the build alternatives were determined by FHWA through UDOT and concurred with by SHPO as documented in the approved DOEFOE (see **Appendix E**). The definitions include:

36 CFR 800.5(a)

Applying the Criteria of Effect -

In consultation with the State Historic Preservation Officer, the Agency Official shall apply the Criteria of Effect to historic properties that may be affected, giving consideration to the views, if any, of interested persons.

No Effect

A finding of *No Effect* occurs either when no historic properties are present or historic properties are present but the undertaking would have no effect upon them as defined in 36 CFR 800.

No Adverse Effect

A finding of *No Adverse Effect* occurs when the undertaking's effects do not meet the criteria of 36 CFR 800 for Adverse Effect or the undertaking is modified or conditions are imposed to avoid adverse effects. This type of impact occurs when the alternative impacts a historic property but does not completely alter the characteristics that qualify it for eligibility for the National Register.

Adverse Effect

An *Adverse Effect* as defined in 36 CFR 800 is found when a project may alter, directly or indirectly, any of the qualifying characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

Examples of an Adverse Effect include complete use of historic structures for the road improvements, access restrictions, large percentage of property used for road right-of-way, and potential relocations of the residence due to closeness of the roadway.

Determination of Historic Boundaries

Historic boundaries were established to include the elements of each property which contribute to setting, feeling, and association. These elements include outbuildings, landscape features, natural features, undeveloped farmland associated with agricultural properties, or other elements that contribute to conveying the property's importance.

In general, the boundaries of historic houses along the corridor are defined as the legal tax description for each property. This definition is based on information contained in two National Register Bulletins:

36 CFR 800.4(d)(1)

No historic properties affected. Either there are no historic properties present or there are historic properties present but the undertaking will have no effect upon them as defined in §800.16(i)...

36CFR 800.16(i)

Effect means alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register.

36 CFR 800.5(b)

Finding of no adverse effect. When the undertaking's effects do not meet the criteria of paragraph (a)(1) of this section or the undertaking is modified or conditions are imposed...to ensure consistency with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines, to avoid adverse effects.

36 CFR 800.5(a)(1)

Criteria of adverse effect. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

- *National Register Bulletin 16A (page 56)* suggest that for urban and suburban properties, the legally recorded parcel number or lot lines are appropriate when those parcels retain their historic boundaries and integrity.
- *National Register Bulletin 21 (page 3)* states “Boundaries should include surrounding land that contributes to the significance of the resources by functioning as the setting.... For example, do not limit the property to the footprint of the building, but include its yards or grounds.”






Many of the older homes along Syracuse Road were once part of larger farm complexes that have since been subdivided into smaller parcels. The result is that for most of these properties, it is only the property now defined by the current tax parcel that retains integrity. If the property has outbuildings, landscape features, natural features, or other elements that contribute to conveying the property’s importance, boundaries are drawn as appropriate so that the historic use of the property and retention of elements or integrity related to that use are included.



















In many cases the associated tax parcel extends to the center of the street. Since the road and associated features (sidewalk, parkstrips, etc) are there by prescriptive use, property within the road limits does not retain integrity. Therefore, the historic boundary is delineated behind the roadway features, generally behind the sidewalk, with the front yard representing a transitional zone between the public and private use of space.

Effects to Historic Properties (see Figures 5-12 to 5-17)

The impacts of Alternatives C and D on historic properties are listed in Table 5-9. A “use” under Section 4(f) was found for all eligible properties for which, under Section 106, there was either an *Adverse Effect* or a *No Adverse Effect* determination. Of the 33 historic properties identified in Table 5-8 there would be a Section 4(f) “use” of 15 properties by Alternative C and 21 properties by Alternative D.

Table 5-9. Historic Property Impacts for Alternative C and Alternative D.

Address	Photos	SHPO Rating	Local Impr. (Yes/No)	Alternative C		Alternative D	
				Effect Determination (Section 106)	Section 4(f) use	Effect Determination (Section 106)	Section 4(f) use
1655 South 2000 West		A	Yes	No Effect	No	No Effect	No
2057 West 1700 South		A	No	No Effect	No	No Effect	No
2047 West 1700 South		B	No	No Effect	No	No Effect	No
1867 West 1700 South		B	No	No Effect	No	No Effect	No
1862 West 1700 South		B	No	Adverse Effect	Yes	Adverse Effect	Yes

Address	Photos	SHPO Rating	Local Impr. (Yes/No)	Alternative C		Alternative D	
				Effect Determination (Section 106)	Section 4(f) use	Effect Determination (Section 106)	Section 4(f) use
1851 West 1700 South		B	No	No Effect	No	No Effect	No
1848 West 1700 South		A	Yes	Adverse Effect	Yes	Adverse Effect	Yes
1797 West 1700 South		C	Yes	Adverse Effect	Yes	No Effect	No
1792 West 1700 South		B	No	No Adverse Effect	Yes	Adverse Effect	Yes
1782 West 1700 South		B	Yes	No Adverse Effect	Yes	Adverse Effect	Yes
1752 West 1700 South		A	No	No Effect	No	Adverse Effect	Yes
1729 West 1700 South		B	No	Adverse Effect	Yes	No Effect	No
1711 West 1700 South		B	No	Adverse Effect	Yes	No Effect	No
1708 West 1700 South		B	No	No Effect	No	Adverse Effect	Yes
1698 West 1700 South		B	No	No Effect	No	Adverse Effect	Yes
1688 West 1700 South		B	No	No Effect	No	Adverse Effect	Yes
1674 West 1700 South		B	No	No Effect	No	Adverse Effect	Yes
1661 West 1700 South		B	No	Adverse Effect	Yes	No Effect	No
1609 West 1700 South		B	No	Adverse Effect	Yes	No Effect	No
1578 West 1700 South		B	No	No Effect	No	Adverse Effect	Yes
1558 West 1700 South		B	No	No Effect	No	Adverse Effect	Yes
1557 West 1700 South		B	No	Adverse Effect	Yes	No Effect	No
1533 West 1700 South		B	No	Adverse Effect	Yes	No Adverse Effect	Yes

Address	Photos	SHPO Rating	Local Impr. (Yes/No)	Alternative C		Alternative D	
				Effect Determination (Section 106)	Section 4(f) use	Effect Determination (Section 106)	Section 4(f) use
1532 West 1700 South		A	No	No Effect	No	Adverse Effect	Yes
1518 West 1700 South		B	Yes	No Effect	No	Adverse Effect	Yes
1412 West 1700 South		B	No	No Effect	No	Adverse Effect	Yes
1384 West 1700 South		B	No	No Effect	No	Adverse Effect	Yes
1379 West 1700 South		B	No	Adverse Effect	Yes	No Effect	No
1224 West 1700 South		B	No	No Effect	No	Adverse Effect	Yes
1206 West 1700 South		C	Yes	No Effect	No	Adverse Effect	Yes
1136 West 1700 South		B	No	No Effect	No	Adverse Effect	Yes
1048 West 1700 South		B	Yes	No Adverse Effect	Yes	Adverse Effect	Yes
1654 South 1000 West		B	No	No Adverse Effect	Yes	No Adverse Effect	Yes

1655 South 2000 West

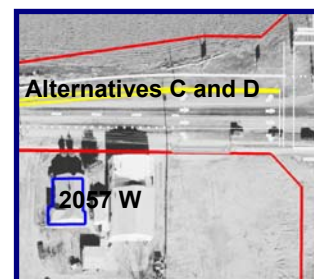


Both Alternatives C and D would widen 2000 West westward in this area and would not require right-of-way from this east-side historic property. Alternatives C and D would result in *No Effect* to this historic property. Alternatives C and D would not result in a Section 4(f) “use” of this historic property.

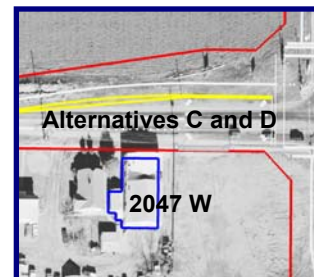


2057 West 1700 South

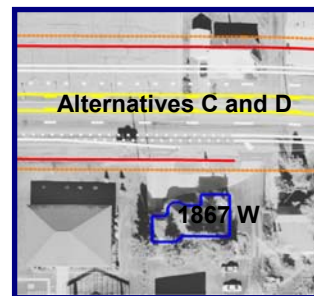
Both Alternatives C and D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternatives C and D would result in *No Effect* to this historic property. Alternatives C and D would not result in a Section 4(f) “use” of this historic property.

2047 West 1700 South

Both Alternatives C and D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternatives C and D would result in *No Effect* to this historic property. Alternatives C and D would not result in a Section 4(f) “use” of this historic property.

1867 West 1700 South

Both Alternatives C and D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternatives C and D would result in *No Effect* to this historic property. Alternatives C and D would not result in a Section 4(f) “use” of this historic property.

1862 West 1700 South

Alternative C would widen the roadway north in this area, requiring approximately an 82-ft by 65-ft area equaling 5,286 ft² (0.12-ac), or about 25% of the total north-side historic property and would require the removal of the historic structure. Alternative C would result in an *Adverse Effect* to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.

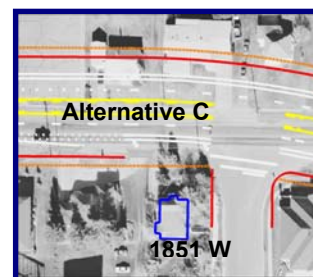


Alternative D would widen the roadway north in this area, requiring approximately an 82-ft by 65-ft area equaling 5,298 ft² (0.12-ac), or about 25% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an *Adverse Effect* to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

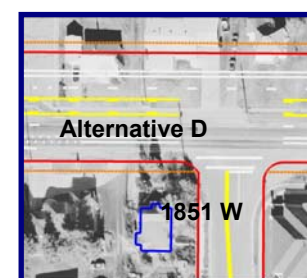


1851 West 1700 South

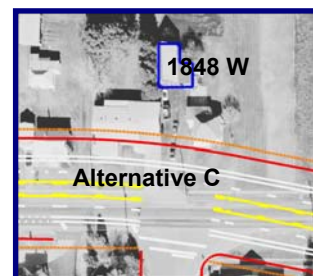
Alternative C would widen the roadway north in this area but would begin a transition in alignment, shifting the road south to avoid north-side properties. Alternative C, in its original form, would have required a perpetual easement on approximately a 66-ft long area, ranging from 0-ft wide to 4-ft wide equaling 104 ft² (0.0025-ac) on the front yard of this south-side historic property. To avoid impacting this historic property, as discussed in Section 5.5 Measures to Minimize Harm, the landscape/utility area was reduced from a 10-ft strip to a strip ranging from 6-ft to 10-ft. As a result of this reduction, Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



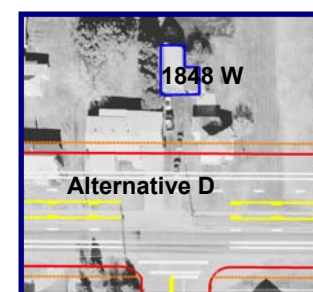
Alternative D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternative D would result in **No Effect** to this historic property. Alternative D would not result in a Section 4(f) “use” of this historic property.

1848 West 1700 South

Alternative C would include a transition in alignment in this area, shifting the road south to avoid north-side properties. Alternative C would require approximately a 225-ft long area ranging, from 36-ft wide to 65-ft wide equaling 12,063 ft² (0.28-ac) from the front yard of this north-side historic property, or about 20% of the total historic property. The two residences on the property would be removed, but the historic structure (Bountiful Lumber Building) would not require removal as a result of the proposed project. However, it is unlikely that future property owners would retain the historic structure. Removal of these two residences would adversely affect the historic structure; thus Alternative C would result in an **Adverse Effect** to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.

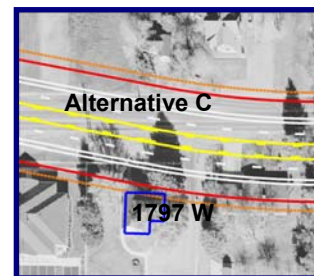


Alternative D would widen the roadway north in this area. Alternative D would require approximately a 225-ft by 65-ft area equaling 14,640 ft² (0.34-ac) from the front yard of this north-side historic property, or about 25% of the total historic property. The two residences on the property would be removed, but the historic structure (Bountiful Lumber Building) would not require removal as a result of the proposed project. However, it is unlikely that future property owners would retain the historic structure. Removal of these two residences would adversely affect the historic structure; thus Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

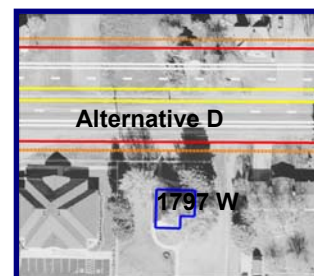


1797 West 1700 South

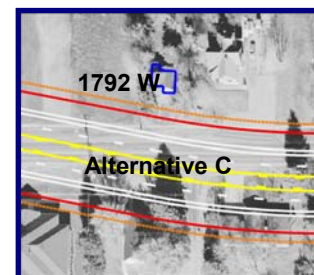
Alternative C includes an alignment transition in this area. Alternative C would widen the roadway north and south in this area. Alternative C would require approximately a 116-ft long area ranging from 35-ft wide to 55-ft equaling 5,308 ft² (0.12-ac) or about 24% of this south-side historic property. The historic structure would be removed. Alternative C would result in an **Adverse Effect** to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.



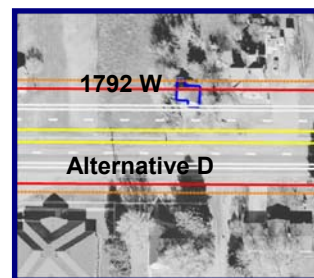
Alternative D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternative D would result in **No Effect** to this historic property. Alternative D would not result in a Section 4(f) “use” of this historic property.

1792 West 1700 South

Alternative C includes an alignment transition in this area. Alternative C would widen the roadway north and south in this area. Alternative C would require approximately a 134-ft long area, ranging from 10-ft to 33-ft equaling 2,821 ft² (0.065-ac) from the front yard of this north-side historic property, or about 7% of the total historic property. The historic house and any contributing features would not be impacted by the proposed project, and access would be maintained. Alternative C would result in **No Adverse Effect** to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.

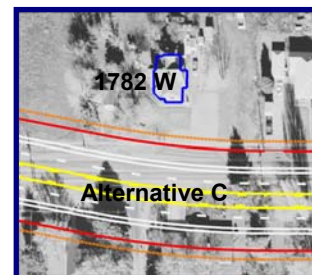


Alternative D would widen the roadway north in this area, requiring approximately a 134-ft by 65-ft area equaling 9,716 ft² (0.22-ac), or about 22% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

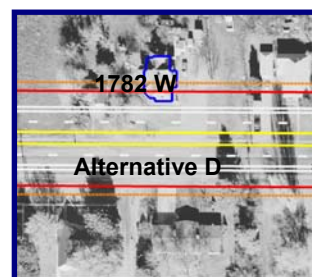


1782 West 1700 South

Alternative C would widen the roadway mostly south in this area, requiring approximately a 90-ft long area ranging from 1-ft wide to 10-ft wide equaling 422 ft² (0.0097-ac) from the front yard of this north-side historic property, or about 3% of the total historic property. The historic house and any contributing features would not be impacted by the proposed project, and access would be maintained. Alternative C would result in **No Adverse Effect** to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.



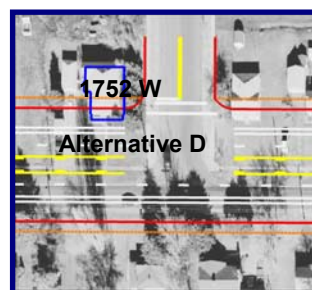
Alternative D would widen the roadway north in this area, requiring approximately a 90-ft by 65-ft area equaling 5,814 ft² (0.13-ac), or about 41% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

1752 West 1700 South

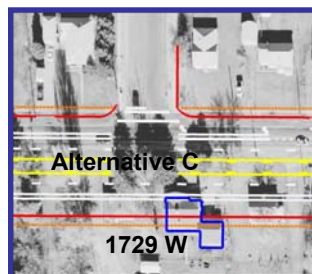
Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



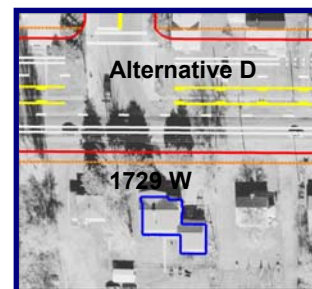
Alternative D would widen the roadway north in this area, requiring approximately a 127-ft by 65-ft area equaling 8,304 ft² (0.19-ac), or about 64% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

1729 West 1700 South

Alternative C would widen the roadway south in this area, requiring approximately an 82-ft by 65-ft area equaling 5,279 ft² (0.12-ac), or about 13% of the total south-side historic property. The historic structure would be removed. Alternative C would result in an **Adverse Effect** to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.



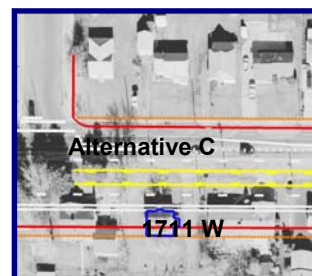
Alternative D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternative D would result in *No Effect* to this historic property. Alternative D would not result in a Section 4(f) “use” of this historic property.



1711 West 1700 South



Alternative C would widen the roadway south in this area, requiring approximately an 82-ft by 65-ft area equaling 5,256 ft² (0.12-ac), or about 28% of the total south-side historic property. The historic structure would be removed. Alternative C would result in an *Adverse Effect* to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.



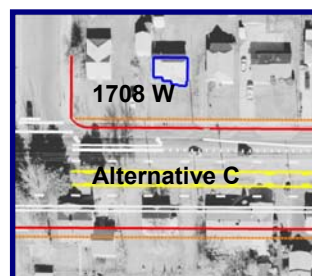
Alternative D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternative D would result in *No Effect* to this historic property. Alternative D would not result in a Section 4(f) “use” of this historic property.



1708 West 1700 South



Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in *No Effect* to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



Alternative D would widen the roadway north in this area, requiring approximately a 66-ft by 65-ft area equaling 4,224 ft² (0.10-ac), or about 48% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an *Adverse Effect* to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

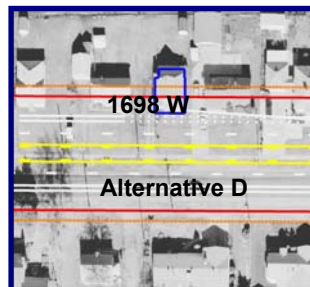


1698 West 1700 South

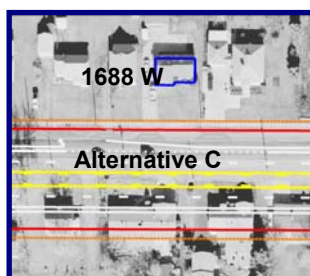
Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



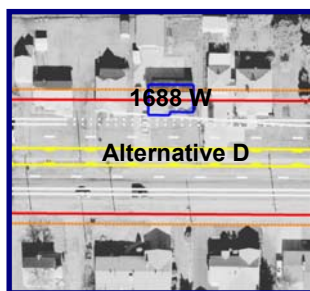
Alternative D would widen the roadway north in this area, requiring approximately a 50-ft by 65-ft area equaling 3,169 ft² (0.073-ac), or about 49% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

1688 West 1700 South

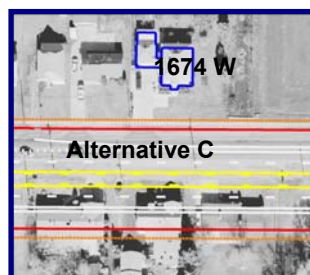
Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



Alternative D would widen the roadway north in this area, requiring approximately a 66-ft by 65-ft area equaling 4,224 ft² (0.10-ac), or about 48% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

1674 West 1700 South

Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



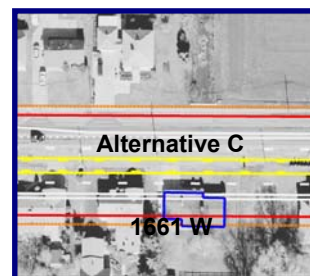
Alternative D would widen the roadway north in this area, requiring approximately a 132-ft by 65-ft area equaling 8,446 ft² (0.19-ac), or about 48% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.



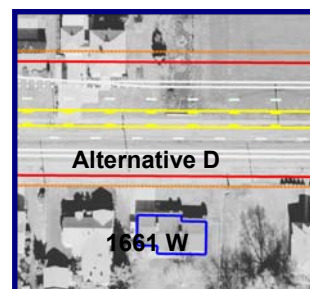
1661 West 1700 South



Alternative C would widen the roadway south in this area, requiring approximately an 89-ft by 63-ft area equaling 5,638 ft² (0.13-ac), or about 24% of the total south-side historic property. The historic structure would be removed. Alternative C would result in an **Adverse Effect** to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.



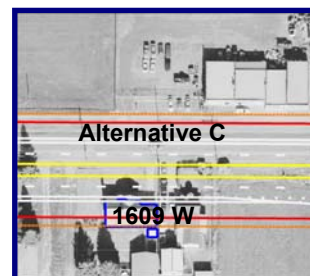
Alternative D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternative D would result in **No Effect** to this historic property. Alternative D would not result in a Section 4(f) “use” of this historic property.



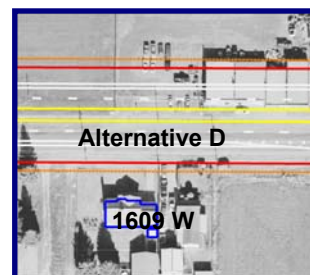
1609 West 1700 South



Alternative C would widen the roadway south in this area, requiring approximately an 80-ft by 65-ft area equaling 5,120 ft² (0.12-ac), or about 32% of the total south-side historic property. The historic structure would be removed. Alternative C would result in an **Adverse Effect** to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.

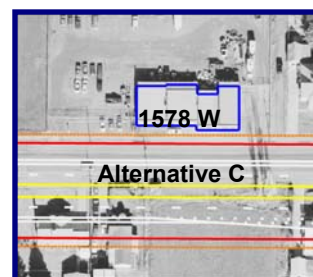


Alternative D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternative D would result in **No Effect** to this historic property. Alternative D would not result in a Section 4(f) “use” of this historic property.

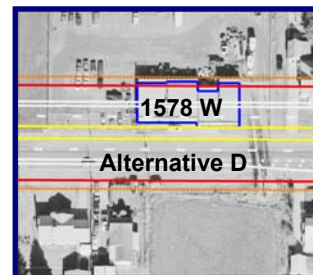


1578 West 1700 South

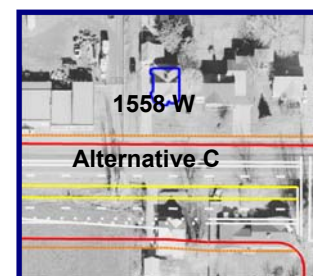
Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



Alternative D would widen the roadway north in this area, requiring approximately a 250-ft by 65-ft area equaling 16,177 ft² (0.37-ac), or about 41% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

1558 West 1700 South

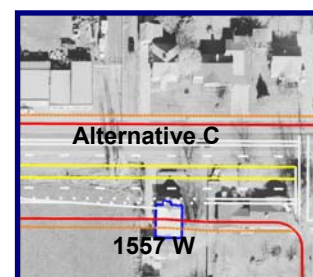
Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



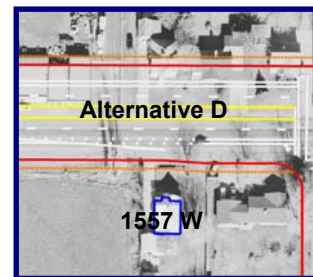
Alternative D would widen the roadway north in this area, requiring approximately a 73-ft by 65-ft area equaling 4,784 ft² (0.11-ac), or about 19% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

1557 West 1700 South

Alternative C would widen the roadway south in this area, requiring approximately a 66-ft by 67-ft area equaling 4,334 ft² (0.099-ac), or about 44% of the total south-side historic property. The historic structure would be removed. Alternative C would result in an **Adverse Effect** to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.

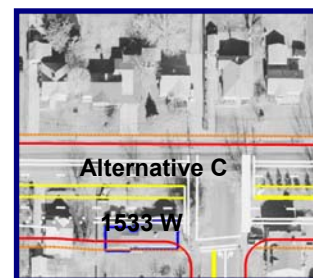


Alternative D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternative D would result in *No Effect* to this historic property. Alternative D would not result in a Section 4(f) “use” of this historic property.



1533 West 1700 South

Alternative C would widen the roadway south in this area, requiring approximately a 115-ft by 55-ft area equaling 6,353 ft² (0.15-ac), or about 29% of the total south-side historic property. The historic structure would be removed. Alternative C would result in an *Adverse Effect* to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.

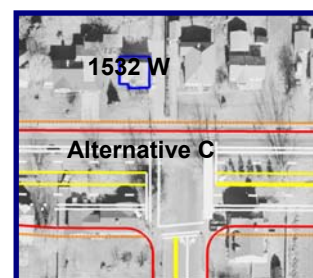


Alternative D would widen Syracuse Road to the north and slightly to the south to accommodate a right-turn lane. This would require a small corner of property approximately 17 ft² (0.0004-ac) or about 0.08% of the total south-side historic property. The historic house and any contributing features would not be impacted by the proposed project, and access would be maintained. Alternative D would result in a *No Adverse Effect* to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.



1532 West 1700 South

Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in *No Effect* to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.

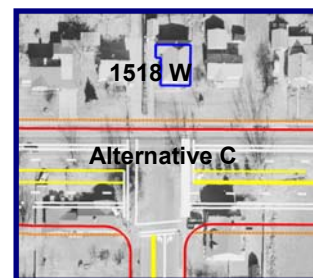


Alternative D would widen the roadway north in this area, requiring approximately a 70-ft by 65-ft area equaling 4,603 ft² (0.11-ac), or about 26% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an *Adverse Effect* to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

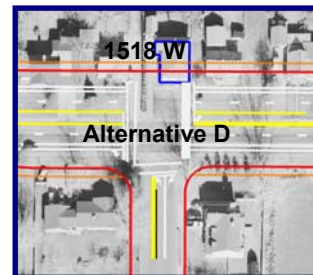


1518 West 1700 South

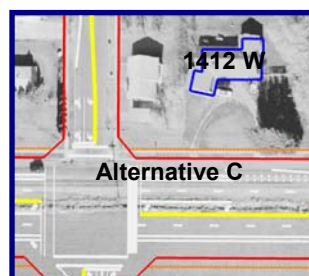
Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



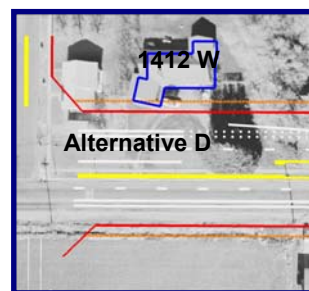
Alternative D would widen the roadway north in this area, requiring approximately a 66-ft by 65-ft area, equaling 4,241 ft² (0.097-ac) or about 36% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

1412 West 1700 South

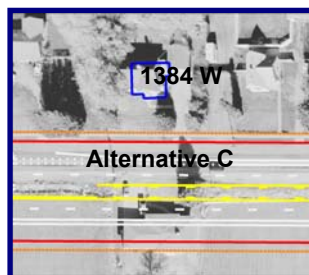
Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



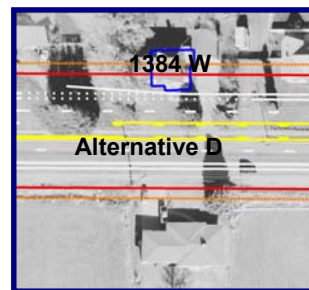
Alternative D would widen the roadway north in this area, requiring approximately a 164-ft by 65-ft area, equaling 10,494 ft² (0.24-ac) or about 29% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

1384 West 1700 South

Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



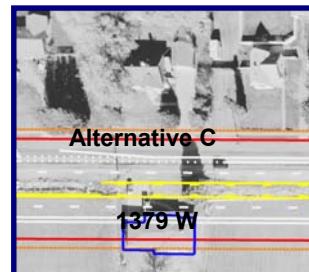
Alternative D would widen the roadway north in this area, requiring approximately a 100-ft by 65-ft area, equaling 6,308 ft² (0.14-ac) or about 54% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.



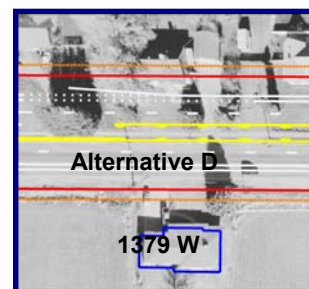
1379 West 1700 South



Alternative C would widen the roadway south in this area, requiring approximately a 102-ft by 64-ft area, equaling 6,525 ft² (0.15-ac) or about 53% of the total south-side historic property. The historic structure would be removed. Alternative C would result in an **Adverse Effect** to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.



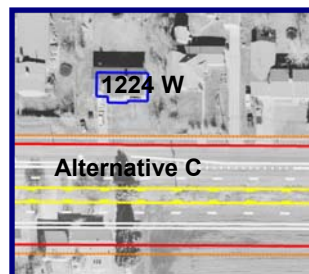
Alternative D would widen the roadway north in this area and would not require right-of-way from this south-side historic property. Alternative D would result in **No Effect** to this historic property. Alternative D would not result in a Section 4(f) “use” of this historic property.



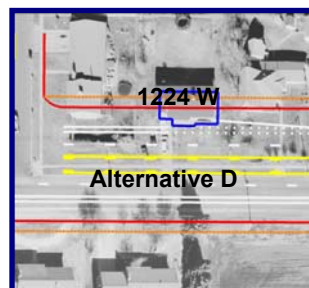
1224 West 1700 South



Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in **No Effect** to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.

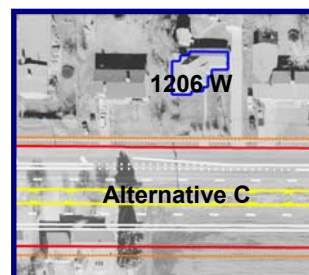


Alternative D would widen the roadway north in this area, requiring approximately a 90-ft by 65-ft area, equaling 5,748 ft² (0.13-ac) or about 45% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an **Adverse Effect** to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

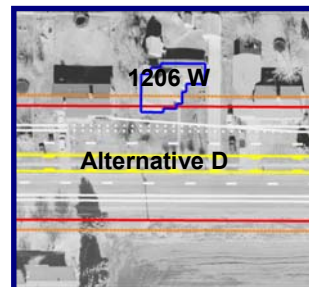


1206 West 1700 South

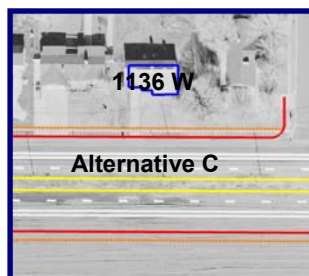
Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in *No Effect* to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



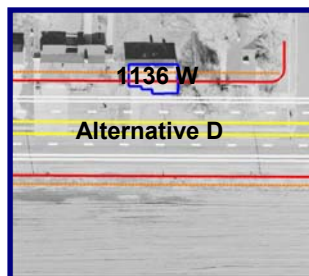
Alternative D would widen the roadway north in this area, requiring approximately a 90-ft by 65-ft area, equaling 5,754 ft² (0.13-ac) or about 45% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an *Adverse Effect* to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

1136 West 1700 South

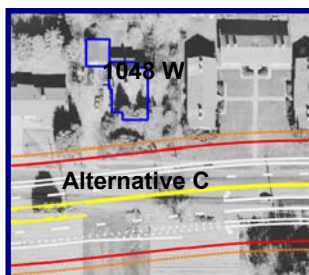
Alternative C would widen the roadway south in this area and would not require right-of-way from this north-side historic property. Alternative C would result in *No Effect* to this historic property. Alternative C would not result in a Section 4(f) “use” of this historic property.



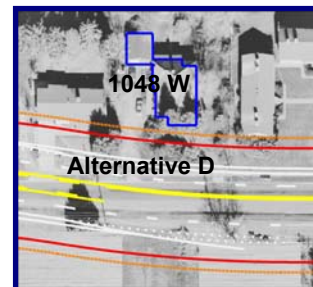
Alternative D would widen the roadway north in this area, requiring approximately an 89-ft by 65-ft area, equaling 5,721 ft² (0.13-ac) or about 45% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an *Adverse Effect* to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

1048 West 1700 South

Alternative C would widen the roadway mostly south in this area requiring approximately a 111-ft long area ranging from 10-ft wide to 23-ft wide, equaling 1,824 ft² (0.041-ac) from the front yard of this north-side historic property, or about 7% of the total historic property. The historic house and any contributing features would not be impacted by the proposed project, and access would be maintained. Alternative C would result in a *No Adverse Effect* to this historic property. Alternative C would result in a Section 4(f) “use” of this historic property.



Alternative D would widen the roadway north in this area, requiring approximately a 111-ft long area ranging from 33-ft wide to 42-ft wide, equaling 4,120 ft² (0.09-ac) or about 15% of the total north-side historic property. The historic structure would be removed. Alternative D would result in an *Adverse Effect* to this historic property. Alternative D would result in a Section 4(f) “use” of this historic property.

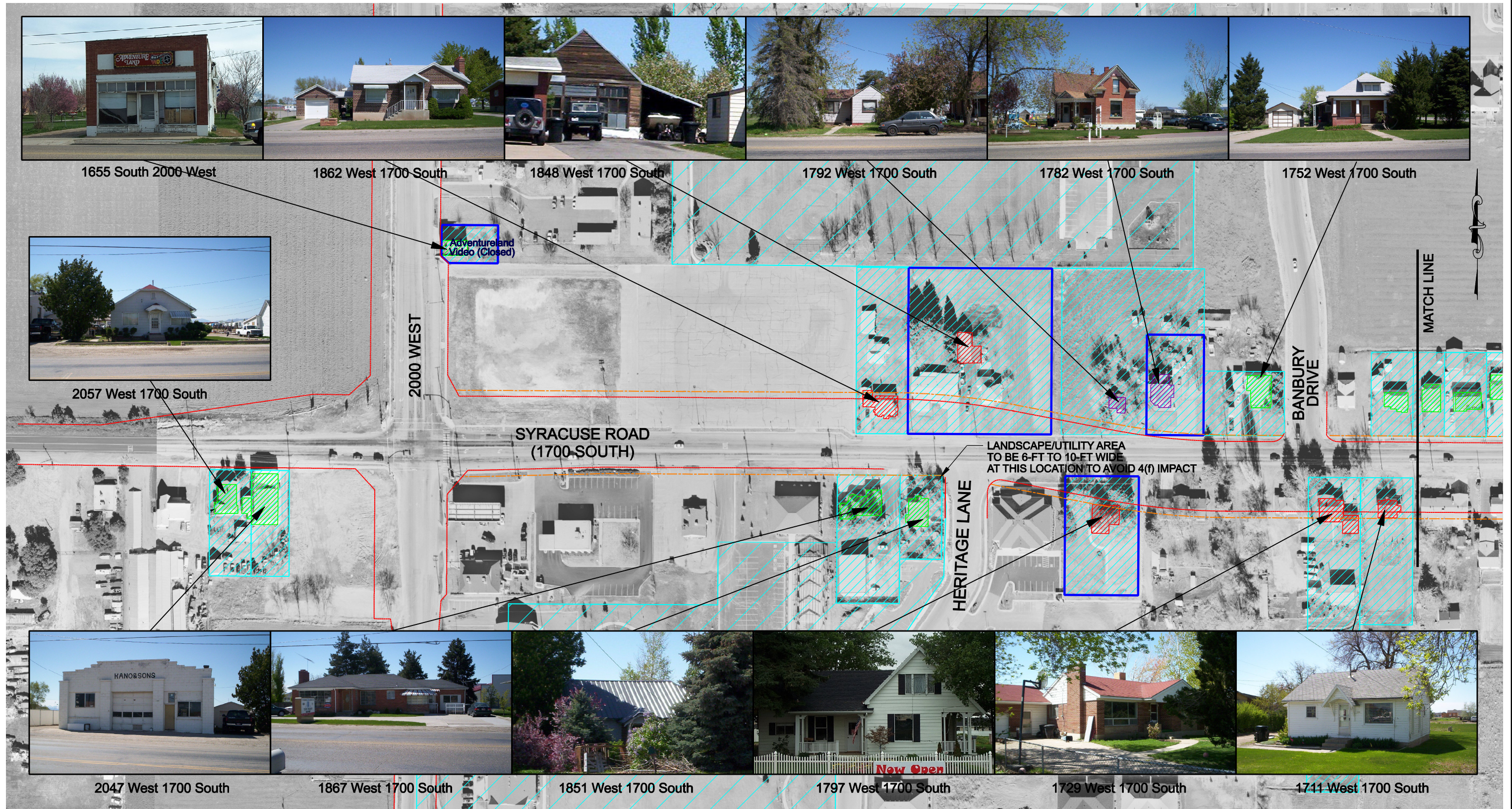


1654 South 1000 West



Alternatives C and D would widen 1000 West westward in this area requiring approximately an 81-ft long area ranging from 2-ft wide to 5-ft wide, equaling 255 ft² (0.006-ac) from the front yard of this west-side historic property, or about 2% of the total historic property. The historic house and any contributing features would not be impacted by the proposed project, and access would be maintained. Alternatives C and D would result in a *No Adverse Effect* to this historic property. Alternatives C and D would result in a Section 4(f) “use” of this historic property.





LEGEND:

- | | | | |
|--|--------------------------------------|--|--|
| | SECTION 4(f) PROPERTY BOUNDARY | | HISTORIC STRUCTURE (NO EFFECT) |
| | PROPERTY OF LOCAL IMPORTANCE | | HISTORIC STRUCTURE (NO ADVERSE EFFECT) |
| | RIGHT-OF-WAY | | HISTORIC STRUCTURE (ADVERSE EFFECT) |
| | LANDSCAPE / UTILITY AREA OR EASEMENT | | |

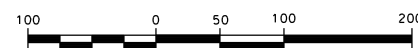




FIGURE 5-12
HISTORIC PROPERTIES
ALTERNATIVE C



LEGEND:

- | | | | |
|---|--------------------------------------|---|--|
|  | SECTION 4(f) PROPERTY BOUNDARY |  | HISTORIC STRUCTURE (NO EFFECT) |
|  | PROPERTY OF LOCAL IMPORTANCE |  | HISTORIC STRUCTURE (NO ADVERSE EFFECT) |
|  | RIGHT-OF-WAY |  | HISTORIC STRUCTURE (ADVERSE EFFECT) |
|  | LANDSCAPE / UTILITY AREA OR EASEMENT | | |

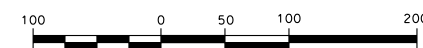


FIGURE 5-13
HISTORIC PROPERTIES
ALTERNATIVE C

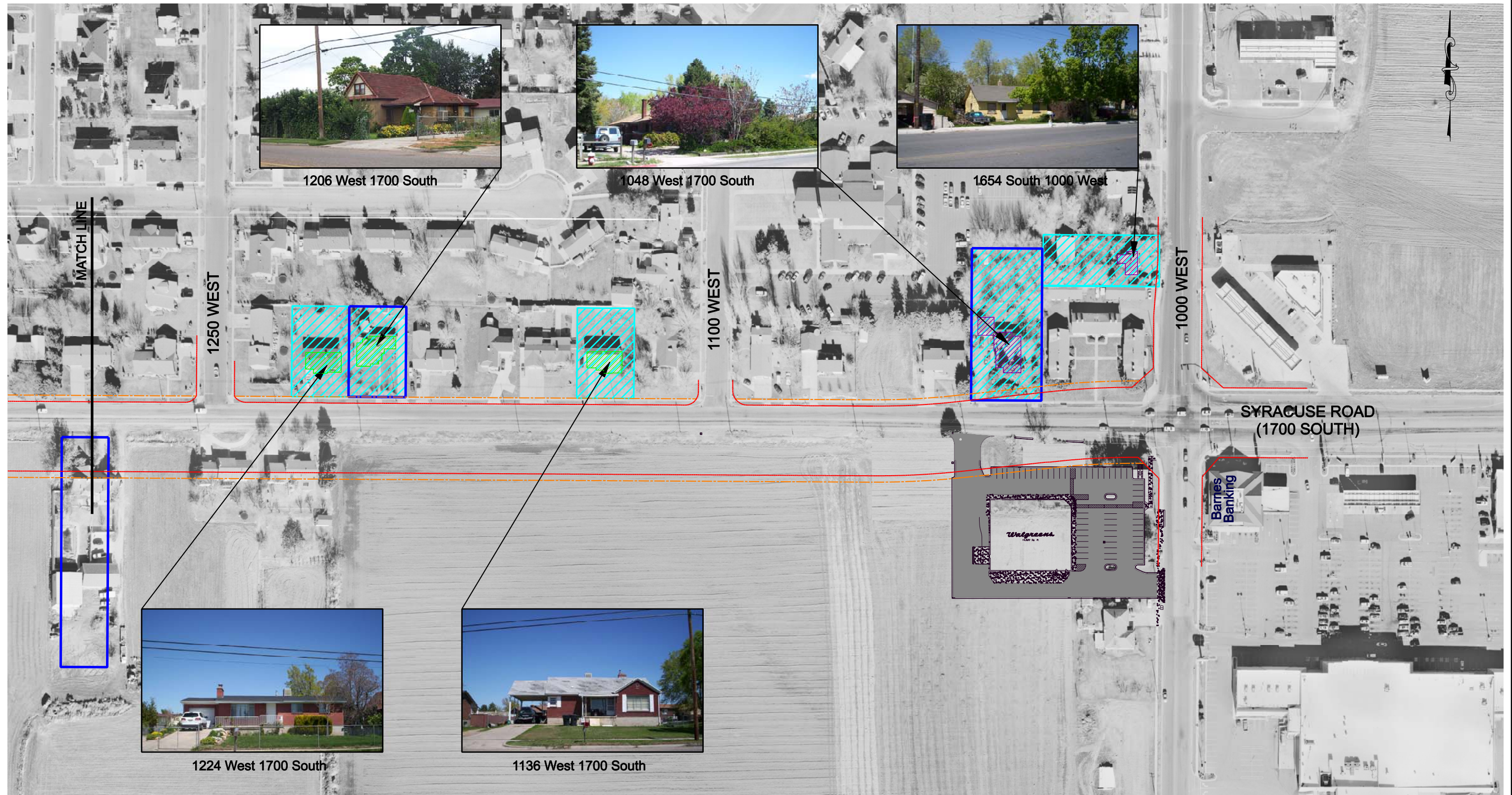
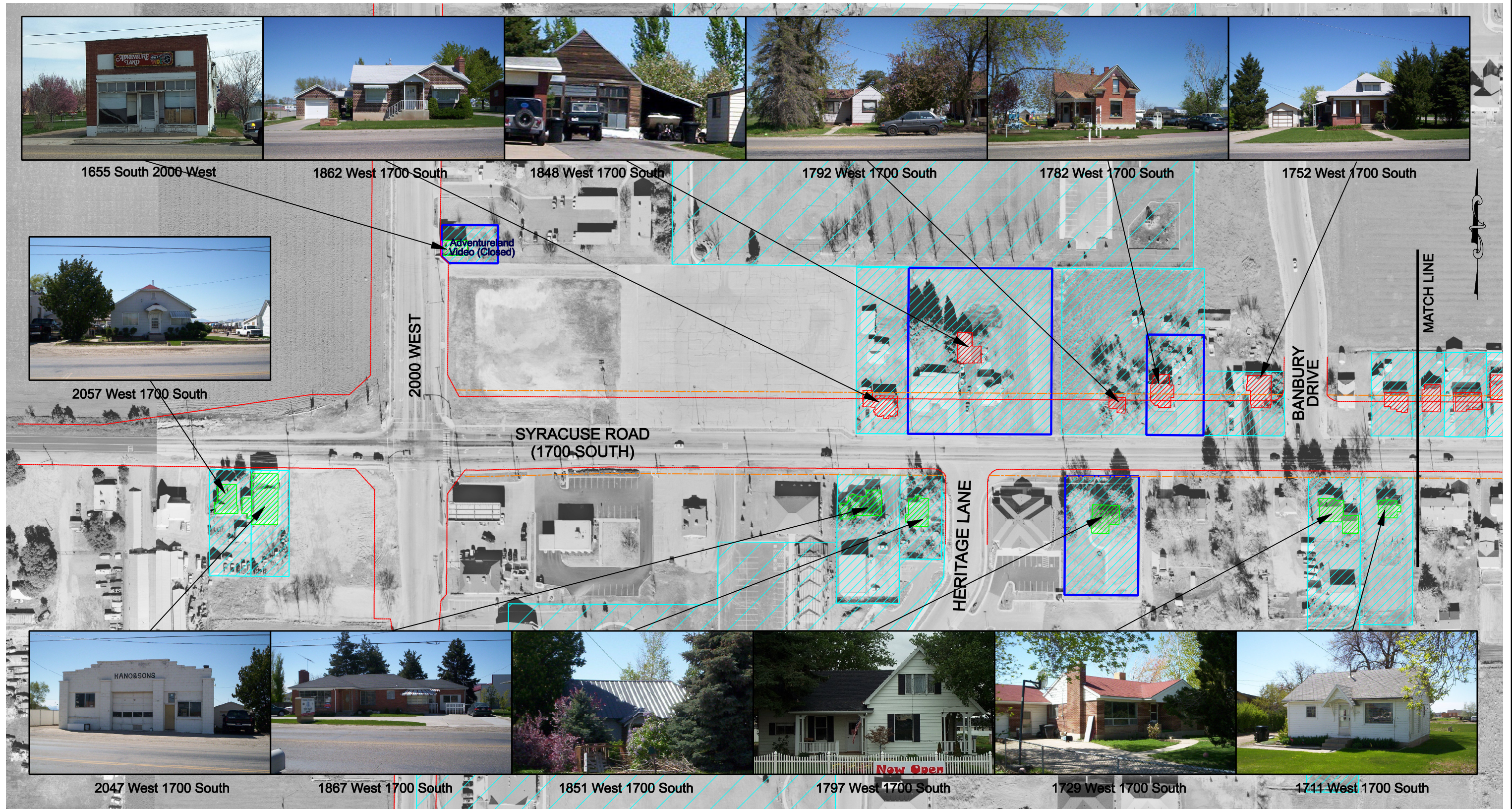


FIGURE 5-14
HISTORIC PROPERTIES
ALTERNATIVE C



LEGEND:

- | | | | |
|--|--------------------------------------|--|--|
| | SECTION 4(f) PROPERTY BOUNDARY | | HISTORIC STRUCTURE (NO EFFECT) |
| | PROPERTY OF LOCAL IMPORTANCE | | HISTORIC STRUCTURE (NO ADVERSE EFFECT) |
| | RIGHT-OF-WAY | | HISTORIC STRUCTURE (ADVERSE EFFECT) |
| | LANDSCAPE / UTILITY AREA OR EASEMENT | | |

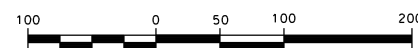


FIGURE 5-15
HISTORIC PROPERTIES
ALTERNATIVE D



LEGEND:

- | | |
|--|--|
|  SECTION 4(f) PROPERTY BOUNDARY |  HISTORIC STRUCTURE (NO EFFECT) |
|  PROPERTY OF LOCAL IMPORTANCE |  HISTORIC STRUCTURE (NO ADVERSE EFFECT) |
|  RIGHT-OF-WAY |  HISTORIC STRUCTURE (ADVERSE EFFECT) |
|  LANDSCAPE / UTILITY AREA OR EASEMENT | |

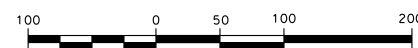


FIGURE 5-16
HISTORIC PROPERTIES
ALTERNATIVE D



LEGEND:

- | | | | |
|---|--------------------------------------|---|--|
|  | SECTION 4(f) PROPERTY BOUNDARY |  | HISTORIC STRUCTURE (NO EFFECT) |
|  | PROPERTY OF LOCAL IMPORTANCE |  | HISTORIC STRUCTURE (NO ADVERSE EFFECT) |
|  | RIGHT-OF-WAY |  | HISTORIC STRUCTURE (ADVERSE EFFECT) |
|  | LANDSCAPE / UTILITY AREA OR EASEMENT | | |

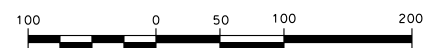


FIGURE 5-17
HISTORIC PROPERTIES
ALTERNATIVE D

5.4 AVOIDANCE ALTERNATIVES

The No-action Alternative would avoid impacts to all historic and recreational properties identified in the project area. However, it would not meet the project purpose and need, and is not considered a prudent alternative. The TSM Alternative and the Transit Alternative would also avoid use of all historic and recreational properties but would not meet the project purpose and need and are not considered prudent alternatives.

The Improving Adjacent Parallel Roads Alternative would avoid historic and recreational properties along Syracuse Road, but would not meet the project purpose and need and would widen and impact adjacent corridors that contain similar historic resources. For these reasons, the Improving Adjacent Parallel Roads Alternative is not considered prudent.

There are three parks near the project corridor. Stoker Park is located north of the project and is not impacted by any of the alternatives. Centennial Park is located on the south side of the project corridor; all alternatives have been shifted north to avoid impacts to this park. Founders Park is located north of the project and is avoided by all alternatives except Alternative F.

No reasonable alternative avoids all historic properties. There are 33 historic properties adjacent to the project corridor, with 19 historic properties on the north side and 12 historic properties on the south side of Syracuse Road and one historic property each on 1000 West and 2000 West. Because historic properties are on each side of the road, each of the remaining alternatives impacts some historic properties.

5.4.1 Alternatives to Avoid Individual Section 4(f) Resources

Although no prudent alternatives were identified to avoid all Section 4(f) resources, two feasible and prudent build alternatives were developed and refined to minimize impacts to individual Section 4(f) resources along the corridor. These alternatives have been evaluated to determine which one results in the least harm to Section 4(f) resources.

Alternative C (South Shift No. 2)

Alternative C includes the reconstruction of Syracuse Road to a five-lane cross-section, widening the roadway primarily to the south.

Alternative D (North Shift)

Alternative D includes the reconstruction of Syracuse Road to a five-lane cross-section, widening the roadway to the north.

Parks and Recreational Areas

Both Alternatives C and D avoid using any property from Centennial Park, Founders Park, or Stoker Park.

Historic Properties**1655 South 2000 West**

Both Alternatives C and D avoid this historic property.

**2057 West 1700 South**

Both Alternatives C and D avoid this historic property.

**2047 West 1700 South**

Both Alternatives C and D avoid this historic property.

**1867 West 1700 South**

Both Alternatives C and D avoid this historic property.

**1862 West 1700 South**

Both Alternatives C and D include widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1947 West 1700 South (Syracuse Express), 1875 West 1700 South (Syracuse Museum and Cultural Center), 1867 West 1700 South (“A” Insurance Agencies, historic structure – Section 4(f) resource), 1851 West 1700 South (historic structure – Section 4(f) resource), and 1747 West 1700 South (Heritage Lane Commercial Plaza) south of Syracuse Road. Therefore, to avoid impacts to 1862 West 1700 South, two Section 4(f) resources would need to be removed. For these reasons, minor alignment shifts are considered not prudent at this location.

**1851 West 1700 South**

Both Alternatives C and D avoid this historic property.



1848 West 1700 South

Both Alternatives C and D include widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1875 West 1700 South (Syracuse Museum and Cultural Center), 1867 West 1700 South (“A” Insurance Agencies, historic structure – Section 4(f) resource), 1851 West 1700 South (historic structure – Section 4(f) resource), and 1747 West 1700 South (Heritage Lane Commercial Plaza) south of Syracuse Road. To avoid impacting 1848 West 1700 South, two Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1797 West 1700 South

Alternative C includes widening to the south at this location. A north alignment shift of approximately 55 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1792 West 1700 South (historic structure – Section 4(f) resource), 1782 West 1700 South (Children’s Tea Parties, historic structure – Section 4(f) resource and property of local importance), and 1752 West 1700 South (historic structure – Section 4(f) resource) north of Syracuse Road. To avoid impacting 1797 West 1700 South, three Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



Alternative D avoids this historic property.

1792 West 1700 South

Alternative C includes a transitional phase in this area where the road shifts south to avoid Section 4(f) resources on the north side of Syracuse Road. The shift would impact the historic property. To avoid impacting this historic property, the entire curve would need to shift west about 225 feet. This shift would require the removal of the structures at 1867 West 1700 South (“A” Insurance Agencies, historic structure – Section 4(f) resource), 1851 West 1700 South (historic structure – Section 4(f) resource), and 1747 West 1700 South (Heritage Lane Commercial Plaza). To avoid impacting 1792 West 1700 South, two Section 4(f) resources would need to be removed. For these reasons, minor alignment shifts are considered not prudent at this location.



Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1851 West 1700 South (historic structure – Section 4(f) resource), 1747 West 1700 South (Heritage Lane Commercial Plaza), 1797 West 1700 South (J. Kelly Hansen Financial Planning/Quilt School, historic structure – Section 4(f) resource and property of local importance), 1765 West 1700 South, and 1729 West 1700 South. To avoid impacting 1792 West 1700 South, two Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1782 West 1700 South

Alternative C includes a transitional phase in this area where the road shifts south to avoid Section 4(f) resources on the north side of Syracuse Road. The shift would impact the historic property. To avoid impacting this historic property, the entire curve would need to shift west about 90 feet. This shift would impact the property at 1867 West 1700 South (“A” Insurance Agencies, historic structure – Section 4(f) resource) and cause greater impacts to the property at 1851 West 1700 South (historic structure – Section 4(f) resource). The structure at 1747 West 1700 South (Heritage Lane Commercial Plaza) would need to be removed. For these reasons, minor alignment shifts are considered not prudent at this location.



Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1747 West 1700 South (Heritage Lane Commercial Plaza), 1797 West 1700 South (J. Kelly Hansen Financial Planning/Quilt School, historic structure – Section 4(f) resource and property of local importance), 1765 West 1700 South, 1729 West 1700 South, and 1729 West 1700 South (historic structure – Section 4(f) resource). To avoid impacting 1782 West 1700 South, two Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1752 West 1700 South

Alternative C avoids this historic property.

Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1797 West 1700 South (J. Kelly Hansen Financial Planning/Quilt School, historic structure – Section 4(f) resource and property of local importance), 1765 West 1700 South, 1729 West 1700 South, 1729 West 1700 South (historic structure – Section 4(f) resource), 1711 West 1700 South (historic structure – Section 4(f) resource), and 1687 West 1700 South. To avoid impacting 1752 West 1700 South, three Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



1729 West 1700 South

Alternative C includes widening to the south at this location. A north alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1792 West 1700 South (historic structure – Section 4(f) resource), 1782 West 1700 South (Children’s Tea Parties, historic structure – Section 4(f) resource and property of local importance), 1752 West 1700 South (historic structure – Section 4(f) resource), 1724 West 1700 South, 1708 West 1700 South (historic structure – Section 4(f) resource), 1698 West 1700 South (historic structure – Section 4(f) resource), 1688 West 1700 South (historic structure – Section 4(f) resource), and 1674 West 1700 South (historic structure – Section 4(f) resource) north of Syracuse Road. To avoid impacting 1729 West 1700 South, seven Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



Alternative D avoids this historic property.

1711 West 1700 South

Alternative C includes widening to the south at this location. A north alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1792 West 1700 South (historic structure – Section 4(f) resource), 1782 West 1700 South (Children’s Tea Parties, historic structure – Section 4(f) resource and property of local importance), 1752 West 1700 South (historic structure – Section 4(f) resource), 1724 West 1700 South, 1708 West 1700 South (historic structure – Section 4(f) resource), 1698 West 1700 South (historic structure – Section 4(f) resource), 1688 West 1700 South (historic structure – Section 4(f) resource), and 1674 West 1700 South (historic structure – Section 4(f) resource) north of Syracuse Road. To avoid impacting 1711 West 1700 South, seven Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



Alternative D avoids this historic property.

1708 West 1700 South

Alternative C avoids this historic property.

Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1765 West 1700 South, 1729 West 1700 South, 1729 West 1700 South (historic structure – Section 4(f) resource), 1711 West 1700 South, (historic structure – Section 4(f) resource), 1687 West 1700 South, 1679 West 1700 South, and 1661 West 1700 South (historic structure – Section 4(f) resource). To avoid impacting 1708 West 1700 South, three Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



1698 West 1700 South

Alternative C avoids this historic property.



Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1729 West 1700 South, 1729 West 1700 South (historic structure – Section 4(f) resource), 1711 West 1700 South, (historic structure – Section 4(f) resource) 1687 West 1700 South, 1679 West 1700 South, and 1661 West 1700 South (historic structure – Section 4(f) resource). To avoid impacting 1698 West 1700 South, three Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1688 West 1700 South

Alternative C avoids this historic property.



Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1729 West 1700 South, 1729 West 1700 South (historic structure – Section 4(f) resource), 1711 West 1700 South, (historic structure – Section 4(f) resource) 1687 West 1700 South, 1679 West 1700 South, and 1661 West 1700 South (historic structure – Section 4(f) resource). To avoid impacting 1688 West 1700 South, three Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1674 West 1700 South

Alternative C avoids this historic property.



Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1729 West 1700 South (historic structure – Section 4(f) resource), 1711 West 1700 South, (historic structure – Section 4(f) resource) 1687 West 1700 South, 1679 West 1700 South, 1661 West 1700 South (historic structure – Section 4(f) resource), 1637 West 1700 South, and 1609 West 1700 South (historic structure – Section 4(f) resource). To avoid impacting 1674 West 1700 South, four Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1661 West 1700 South

Alternative C includes widening to the south at this location. A north alignment shift of approximately 63 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1708 West 1700 South (historic structure – Section 4(f) resource), 1698 West 1700 South (historic structure – Section 4(f) resource), 1688 West 1700 South (historic structure – Section 4(f) resource), and 1674 West 1700 South (historic structure – Section 4(f) resource), north of Syracuse Road. To avoid impacting 1661 West 1700 South, four Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



Alternative D avoids this historic property.

1609 West 1700 South

Alternative C includes widening to the south at this location. A north alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1578 West 1700 South (Paul's Auto Repair, Thurgood Plumbing, historic structure – Section 4(f) resource) and 1558 West 1700 South (historic structure – Section 4(f) resource). To avoid impacting 1609 West 1700 South, two Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



Alternative D avoids this historic property.

1578 West 1700 South

Alternative C avoids this historic property.

Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1637 West 1700 South, 1609 West 1700 South (historic structure – Section 4(f) resource), 1597 West 1700 South (Automatic Transmission Service), 1557 West 1700 South (historic structure – Section 4(f) resource), and 1533 West 1700 South (historic structure – Section 4(f) resource). To avoid impacting 1578 West 1700 South, three Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1558 West 1700 South

Alternative C avoids this historic property.



Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1609 West 1700 South (historic structure – Section 4(f) resource), 1597 West 1700 South (Automatic Transmission Service), 1557 West 1700 South (historic structure – Section 4(f) resource), 1533 West 1700 South (historic structure – Section 4(f) resource), and 1729 South Allison Way. To avoid impacting 1558 West 1700 South, three Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1557 West 1700 South

Alternative C includes widening to the south at this location. A north alignment shift of approximately 67 feet would be needed to completely avoid impacting this historic property. This would require the removal of the structures at 1578 West 1700 South (Paul's Auto Repair, Thurgood Plumbing, historic structure – Section 4(f) resource), 1558 West 1700 South (historic structure – Section 4(f) resource), 1546 West 1700 South, 1532 West 1700 South (historic structure – Section 4(f) resource), 1518 West 1700 South (historic structure – Section 4(f) resource and property of local importance), and 1506 West 1700 South north of Syracuse Road. To avoid impacting 1557 West 1700 South, four Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



Alternative D avoids this historic property.

1533 West 1700 South

Alternative C includes widening to the south at this location, the addition of a right-turn lane (east to south traffic movement), and widening of Allison Way to accommodate a left-turn lane (north to west traffic movement). A Syracuse Road north alignment shift of approximately 69 feet. This would require the removal of the structures at 1578 West 1700 South (Paul's Auto Repair, Thurgood Plumbing, historic structure – Section 4(f) resource), 1558 West 1700 South (historic structure – Section 4(f) resource), 1546 West 1700 South, 1532 West 1700 South (historic structure – Section 4(f) resource), 1518 West 1700 South (historic structure – Section 4(f) resource and property of local importance), 1506 West 1700 South, and 1492 West 1700 South north of Syracuse Road. To avoid impacting 1533 West 1700 South, four Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



Alternative D includes widening to the north at this location and the addition of a right-turn lane (east to south traffic movement). A Syracuse Road north alignment shift of approximately 13 feet would be needed to completely avoid impacting this historic property.

1532 West 1700 South

Alternative C avoids this historic property.

Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1597 West 1700 South (Automatic Transmission Service), 1557 West 1700 South (historic structure – Section 4(f) resource), 1533 West 1700 South (historic structure – Section 4(f) resource), and 1729 South Allison Way. To avoid impacting 1532 West 1700 South, two Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1518 West 1700 South

Alternative C avoids this historic property.

Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1557 West 1700 South (historic structure – Section 4(f) resource), 1533 West 1700 South (historic structure – Section 4(f) resource), and 1729 South Allison Way. To avoid impacting 1518 West 1700 South, two Section 4(f) resources would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1412 West 1700 South

Alternative C avoids this historic property.

Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structure at 1379 West 1700 South (historic structure – Section 4(f) resource). To avoid impacting 1412 West 1700 South, one Section 4(f) resource would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



1384 West 1700 South

Alternative C avoids this historic property.

Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structure at 1379 West 1700 South (historic structure – Section 4(f) resource). To avoid impacting 1384 West 1700 South, one Section 4(f) resource would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.

1379 West 1700 South

Alternative C includes widening to the south at this location. The alignment at this location would have to be moved north about 64 feet to avoid impacting this property. This would require the removal of the structures at 1384 West 1700 South (historic structure – Section 4(f) resource), 1358 West 1700 South, and 1342 West 1700 South north of Syracuse Road. To avoid impacting 1379 West 1700 South, one Section 4(f) resource would need to be removed. For this reason, minor alignment shifts are considered not prudent at this location.



Alternative D avoids this historic property.

1224 West 1700 South

Alternative C avoids this historic property.

Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1283 West 1700 South and 1261 West 1700 South. For this reason, minor alignments shifts are considered not prudent at this location.

1206 West 1700 South

Alternative C avoids this historic property.

Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would require removal of the structures at 1283 West 1700 South and 1261 West 1700 South. For this reason, minor alignment shifts are considered not prudent at this location.



1136 West 1700 South

Alternative C avoids this historic property.

Alternative D includes widening to the north at this location. A south alignment shift of approximately 65 feet would be needed to completely avoid impacting this historic property. This would not require the removal of any structures.

1048 West 1700 South

Alternative C includes a transitional phase in this area where the road shifts north to meet the intersection at 1000 West. The shift would impact the historic property. A south alignment shift of approximately 23 feet would be needed to completely avoid impact to the historic property. This shift would make it impossible for Syracuse Road to meet the existing 1000 West Intersection. For this reason, minor alignment shifts are considered not prudent at this location.



Alternative D includes a transitional phase in this area where the road shifts south to meet the intersection at 1000 West. A south alignment shift of approximately 42 feet would be needed to completely avoid impact to the historic property. This shift would make it impossible for Syracuse Road to meet the existing 1000 West Intersection. For this reason, minor alignment shifts are considered not prudent at this location.

1654 South 1000 West

Both Alternatives C and D include widening 1000 West westward at this location to accommodate a right-turn lane, two left-turn lanes, and one travel lane at the intersection of Syracuse Road and 1000 West. An east alignment shift of approximately 5 feet would be needed to completely avoid impact to this property. This east shift would make it impossible for 1000 West to meet the existing intersection. For this reason, minor alignment shifts are considered not prudent at this location.

***Summary***

Minor alignment shifts are not considered prudent for either Alternative C or Alternative D for any individual property. Due to the very nature of widening to one side of an existing straight alignment, small alignment shifts do not notably reduce effects to the other side of the road.

5.4.2 Refinement of Roadway Cross-Section

A narrower 90-ft cross-section was developed which reduced the width of the shoulders and parkstrip to determine if a narrower roadway section would minimize impacts to Section 4(f) resources. Environmental impacts of the 90-ft cross-sections were compared with the impacts of the 110-ft cross-section for Alternative C and Alternative D (see Table 5-5). The total number of affected Section 4(f) properties would be the same for both the 90-ft and 110-ft cross-sections. The 90-ft cross-sections do not meet purpose and need, do not meet the other goals and objectives as identified in Chapter 1, and do not substantially minimize environmental impacts. They are therefore not considered prudent.

Cross-section widths between 90-ft and 110-ft would produce similar impacts to Section 4(f) properties as the 90-ft and 110-ft cross-sections. Varying the cross-section throughout the corridor to avoid/minimize impacts to Section 4(f) properties generally is not practical and would not maintain continuity of roadway features (widths of lanes, shoulders, parkstrips, sidewalks, etc.). However, as discussed in the measures to minimize harm section (Section 5.5), Section 4(f) “use” of the property located at 1851 West 1700 South can be avoided, by reducing the width of the perpetual easement associated with the proposed 10-ft landscape/utility area to a strip ranging from 6-ft to 10-ft for the front yard of the property, without affecting continuity of roadway features.

5.5 MEASURES TO MINIMIZE HARM

Minimization efforts were considered throughout project development and the analysis of avoidance alternatives. The following discussion focuses on measures to minimize harm to Section 4(f) resources impacted by Alternatives C and D.

Design Measures

Complete avoidance of all historic structures is not prudent, as discussed in the Avoidance Alternative section. Therefore, design and construction measures to minimize impacts to historic properties were considered within the proposed action. The following design and construction measures were considered:

- Reduced right-of-way
- Steeper cut and fill slopes
- Retaining walls
- Minor alignment shifts
- 10-ft landscape/utility area

Reduced Right-of-Way

A reduced right-of-way (90-ft) was considered for the historic structures impacted by the proposed action. However, a 90-ft cross-section would not substantially reduce impacts to Section 4(f) resources and does not meet the project purpose and need. Therefore a reduced right-of-way was eliminated from consideration as a minimization alternative.

Alternative C, in its original form, would have required a perpetual easement on approximately a 66-ft long area ranging from 0-ft wide to 4-ft wide equaling 104 ft² (0.0025-ac) on the front yard of 1851 West 1700 South. To avoid impacting this historic property the landscape/utility area was reduced from a 10-ft strip to a strip ranging from 6-ft to 10-ft.

Steeper Cut and Fill Slopes

Steeper cut and fill slopes were considered for the historic structures impacted by the proposed action. However, the impacts to these historic structures are not from roadway cut/fill slopes but from the actual roadway alignment. Therefore, the use of steeper cut and fill slopes was eliminated from consideration as a minimization alternative because their use does not minimize any impact to Section 4(f) properties.

Retaining Walls

Retaining walls were considered for the historic structures impacted by the proposed action. However, the impacts to these historic structures are not from roadway cut/fill slopes but from the actual roadway alignment. Therefore, the use of retaining walls was eliminated from consideration as a minimization alternative because their use does not minimize any impact to Section 4(f) properties.

Minor Alignment Shifts

Minor alignment shifts for each affected property were discussed in Section 5.4 Avoidance Alternatives. Minor alignment shifts were not considered prudent for either Alternative C or Alternative D for any individual property. Due to the very nature of widening to the north and south of an existing straight alignment, small alignment shifts, to avoid individual properties, result in impacts to properties on the other side of the road.

10-ft Landscape/Utility Area

In order to reconstruct overhead power and gravity flow irrigation along the corridor, a 10-ft perpetual easement would be required on individual properties. A perpetual easement on a Section 4(f) property would be considered a “use.” To minimize impacts to Section 4(f) properties and avoid “use” where possible, both Alternatives C and D were refined such that a perpetual easement would not be required within the boundaries of otherwise unaffected Section 4(f) properties. Instead, in areas where Section 4(f) properties were being avoided, utilities would be reconstructed within a 10-ft landscape/utility area that would be included in the existing roadway right-of-way rather than in a perpetual easement. For Alternative C, this would include the north side of Syracuse Road between 1000 West and 1782 West and the south side between Heritage Lane and 2000 West. For Alternative D, this would include the south side of Syracuse Road between 1000 West and 2000 West.

Mitigation and Memorandum of Agreement

A Memorandum of Agreement (MOA) to resolve adverse effects to historic properties has been prepared (see **Appendix C**) and agreed upon and will be executed by UDOT, FHWA, Syracuse City, Syracuse Museum Foundation, and SHPO. The Advisory Council on Historic Preservation has indicated that their participation is not needed for this project (see January 18, 2006 letter in Chapter 8). The major stipulations of the MOA include:






- An Intensive Level Survey (ILS) will be prepared for the 10 properties adversely affected by the project: 1379 West 1700 South, 1533 West 1700 South, 1557 West 1700 South, 1609 West 1700 South, 1661 West 1700 South, 1711 West 1700 South, 1729 West 1700 South, 1797 West 1700 South, 1848 West 1700 South, and 1862 West 1700 South.
- Additionally, an ILS will be prepared for five additional locally-important properties that will not be adversely affected by the project: 1048 West 1700 South, 1206 West 1700 South, 1518 West 1700 South, 1782 West 1700 South, and 1655 South 2000 West.
- UDOT will provide the Certified Local Government with an opportunity to salvage materials prior to demolition of historic properties.
- Measures regarding discovery of cultural resources during construction as detailed in the MOA.
- All other measures as detailed in the MOA.










In addition to the mitigation measures in the MOA, UDOT will assess the current condition of the adversely affected properties to determine which properties may be marketed for relocation and preservation. UDOT will prepare a plan for marketing the adversely affected properties for relocation which will include an information package about the project, a distribution list of potential purchasers, and a plan and schedule for advertising, receiving, and reviewing bids. UDOT will select a bidder whose bid provides for rehabilitating and maintaining the property, has the financial resources to carry out the terms of the offer, and agrees to accept the property with deed restrictions. If an acceptable bid is not received, UDOT may demolish the property.

5.6 SUMMARY OF SECTION 4(F) IMPACTS

The analysis shows there is no feasible and prudent alternative that would avoid all Section 4(f) properties. As summarized in Table 5-10, Alternative C would result in the least harm to Section 4(f) resources. The Preferred Alternative was not disclosed as part of the Draft EIS, but would be identified after the Public Hearing has been held and all input from the hearing was evaluated and incorporated into the environmental document. The majority of comments received as part of the Public Hearing and Draft EIS Comment Period were supportive of Alternative C. No substantive comments were received with new information that would be persuasive to the selection of a different alternative. Thus, Alternative C has been selected as the Preferred Alternative for Syracuse Road.

Table 5-10. Summary of Section 4(f) Impacts from Alternative C.

Address	Photos	Section 4(f) Use		NRHP Criterion	SHPO Rating	Locally Important* (Yes/No)
		No Adverse Effect	Adverse Effect			
1862 West 1700 South			✓	C	B	No
1848 West 1700 South			✓	A, C	A	Yes
1797 West 1700 South			✓	B	C	Yes
1792 West 1700 South		✓		C	B	No
1782 West 1700 South		✓		B, C	B	Yes

Address	Photos	Section 4(f) Use		NRHP Criterion	SHPO Rating	Locally Important* (Yes/No)
		No Adverse Effect	Adverse Effect			
1729 West 1700 South			✓	C	B	No
1711 West 1700 South			✓	C	B	No
1661 West 1700 South			✓	C	B	No
1609 West 1700 South			✓	C	B	No
1557 West 1700 South			✓	C	B	No
1533 West 1700 South			✓	C	B	No
1379 West 1700 South			✓	C	B	No
1048 West 1700 South		✓		B, C	B	Yes
1654 South 1000 West		✓		C	B	No
TOTAL:		4	10			

* As identified by the Syracuse Museum Foundation

5.7 COORDINATION















This section outlines the coordination efforts between FHWA and UDOT and the various agencies that have jurisdiction over Section 4(f) resources.

SHPO has reviewed and agreed to the DOEFOE, which was prepared by FHWA, through UDOT (see **Appendix C**). Coordination between UDOT, FHWA, and SHPO is ongoing and has included avoidance alternatives, effects or impacts on the Section 4(f) properties, and measures to minimize harm as discussed in this Section 4(f) Evaluation. A MOA has been prepared (see **Appendix C**) and agreed upon and will be executed by UDOT, FHWA, SHPO, the Syracuse Museum Foundation, and Syracuse City.

As part of Section 106 regulations, coordination has included correspondence between the FHWA and Native American tribes that may have cultural and historical interest within the project area (see December 16, 2004 letter in Chapter 8). The Native American Tribes consulted included the Northwestern Band of Shoshone Nation, Skull Valley Band of Goshute Indians, and Eastern Shoshone Business Council. A Notice of Adverse Effect was filed in the Davis County Clipper and Standard Examiner to allow any interested persons or groups to make comments regarding the properties with an adverse effect due to Alternative C (see March 28, 2006 Proof of Publications in Chapter 8).

5.8 CONCLUDING STATEMENT

Based on the above considerations, there is no feasible and prudent alternative to the use of the land from these properties:

- | | |
|--|---|
| ▪  1862 West 1700 South | ▪  1661 West 1700 South |
| ▪  1848 West 1700 South | ▪  1609 West 1700 South |
| ▪  1797 West 1700 South | ▪  1557 West 1700 South |
| ▪  1792 West 1700 South | ▪  1533 West 1700 South |
| ▪  1782 West 1700 South | ▪  1379 West 1700 South |
| ▪  1729 West 1700 South | ▪  1048 West 1700 South |
| ▪  1711 West 1700 South | ▪  1654 South 1000 West |

The Preferred Alternative includes all possible planning to minimize harm to these Section 4(f) properties and sites resulting from such use. Based on the above considerations, there is no feasible and prudent alternative that avoids the use of Section 4(f) resources, and the proposed action includes all possible planning to minimize harm resulting from such use.